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# SCHOOL RECREATIONS AND AMUSEMENTS

A COMPANION VOLUME TO KING'S "SCHOOL  
INTERESTS AND DUTIES," PREPARED  
ESPECIALLY FOR TEACHERS'  
READING CIRCLES

BY

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SCH, REC. & AMUS.

## PREFACE

TRUE education is the symmetrical and harmonious development of the various powers and faculties of the human body and soul. Education of some sort begins with the infant in the cradle, and is stopped only by the hand of death. In this fact is the seriousness of the subject. If education were not a continuous process, the teacher might hope to build a new structure upon a new foundation. As a fact, however, he is always building with the materials or upon the substructure of another. Any system of education is faulty which does not take this fact into account.

A training confined almost exclusively to the physical nature gave to the world the rugged, narrow-minded, and venal Spartan. A training of the body and mind produced the fickle and unscrupulous Athenian. The broader education of modern times is threefold, concerning itself with physical, mental, and moral training. For many and weighty reasons, the greater part of the time and attention of the teacher is given to the training of the minds of his pupils. This is his special function, and the training of the teacher is designed to fit him for this work. School appliances and books have multiplied and improved until, in respect of these, our schools are the best equipped in the world. In the general desire to make the training of the mind as complete as possible, other considerations equally important have been in a measure overlooked.

This book is based upon two ideas. First, that the surroundings and the various elements of school life should accord as closely as possible with the needs of the unfolding nature and the growing abilities of the child, and that they should be a source of constant and increasing pleasure to the pupil. Second, that school life is a period in which the training of youths should possess harmony, unity, and completeness, including not only instruction in books, but much of nature, of social life, and of physical culture.

The hope of reward and the fear of punishment are the two great guiding motives of life. Of the two, the first is much the more potent and important. Yet it would seem that our schools are often managed upon the other basis, and that the fear of punishment is the motive chiefly relied upon for the government of many of the pupils. We cannot dispense with this fear of pun-



ishment; but ought it not to be kept in the background, while the pleasure which comes from duty well done and from the possession of knowledge for its own sake is kept constantly before the pupil?

The school should be pleasant and cheerful, with no more restraint than is necessary for good, orderly work; and the widest possible latitude should be given to allow the minds of the pupils to develop according to their natural inclinations. I would not ignore the labor of study or seek to make a royal road to knowledge. I would emphasize the dignity of labor, and the honor and satisfaction which come from faithful work. I would lay stress upon the necessity for such work as a training for the duties of life. But I would remove all unnecessary friction and strive to make study as natural as play.

The child who is absent from school should feel that he is missing something worth having — not enjoying a period of emancipation. We can reach this result if we look at school life from the standpoint of the child, as well as from that of the teacher. When the work is made inviting, the teacher has all the more reason to insist that it be faithfully performed.

School recreations of various nature may be made profitable in themselves, as well as helpful for the rest and entertainment which they afford. Intellectual recreations have the effect of introducing into the school work much information which otherwise would not be so generally or so happily acquired. Physical recreations add greatly to the health and vigor of children, cultivate cheerfulness, and quicken the activities of both mind and body.

By directing the recreations of pupils, the teacher may lead them to employ advantageously much time that would be wasted otherwise, when the school is not in session. Pupils should learn that a successful life is a busy, active life; that according to the law of mental life, they must either grow in power or lose power. Not a little of the teacher's responsibility consists in his realization of this fact, and in his impressing it upon his pupils.

To succeed even approximately in producing a well-rounded mind, bodily vigor, and strength of character, is the ideal of the teacher. The ideal is but imperfectly realized; yet when seemingly still distant, it is often most nearly attained. Such an ideal can be approached only by dint of persistent labor and unwavering faith.

In conclusion, acknowledgments are due to the authorities of the Newberry Library, for helpful and unfailing courtesy; to Mr. B. N. Jaquish, for useful suggestions in the chapters on science; to A. S. Barnes & Co., the publishers of Root's *School Amusements*, for permission to quote from that book in the chapter on "Military Drills"; and to Mr. Hubert M. Skinner, for valuable assistance and advice.

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## CHAPTER I

### MORNING EXERCISES

**Variety a Necessity of Childhood.** — It is a most important fact, and one which every teacher has met, that child life in its normal condition makes a constant demand for change and variety in its daily régime. It is one of the chief functions of the teacher to meet this demand, and to meet it satisfactorily; to furnish scope for the ever-increasing mental and bodily activity of the child, to supply new food for thought and new subjects of interest. The mastery of the assigned lessons in the text-books is only a part of the pupil's education. What of the other part? What time can be found for it? How and where shall the child become acquainted with contemporaneous history and literature, with the new and important discoveries and inventions? How shall he be led to acquire for himself a knowledge of current events, and to understand their nature and significance? For once arouse and stimulate his interest, and he will become acquainted with them.

**The Time for General Exercises.** — Evidently the time that can be taken from the regular work of the classes and given to more general subjects outside the text-books is limited in amount. The best use, therefore, must be made of it. A short period of study before the recitations begin will be found of great value. It will serve to direct the attention of the pupils away from extraneous interests and to the work of the day. A part of this time should be set aside for appropriate opening exercises, which may be made a

means of profitable recreation, their attractiveness lending a special incentive to punctuality in the morning.

**Devotional Exercises.** — In the great majority of American schools devotional exercises of some form have a place, and it will not be inappropriate here to take note of these as a suitable introduction to the exercises of a purely secular character. In many schools the morning devotions consist of the reading of a portion of the Scripture, a prayer (sometimes the Lord's Prayer, which the entire school repeats), and the singing of religious songs. Frequently the Bible reading or the prayer is omitted. Exercises of this character, being viewed as religious instruction or as a formal mode of worship, have been the subject of much controversy.

"There is small ground," says Dr. E. E. White, "for the claim that these simple exercises are in any just sense technical religious instruction, and much less for the assertion that they are sectarian instruction. The practical end of these exercises is not religious instruction, but the awakening and deepening of religious feeling; and when they fail to secure this end, they fail to realize their true purpose. . . . The reading of the Bible in an indifferent and perfunctory manner neither increases the pupils' reverence for it nor touches their emotional nature. In too many schools the Bible is read in an irreverent manner, many of the pupils, it may be, meanwhile preparing lessons, or doing worse; and the most beautiful hymns of praise are so sung (?) as to rob them of all religious influence. Even the Lord's Prayer is sometimes recited noisily, and too often irreverently. The real end of the so-called devotional exercise is thus subverted, and we have no hesitation in saying that it would be much better to omit the exercise altogether than to conduct it in an improper manner. It must ever be kept in mind that what the school needs for its ends is not religious ceremony as such, but *religious influence as a means to moral training.*"

**Selections for Devotional Reading.**—For the devotional readings of Scripture, selections should be made which are complete stories in themselves, which reveal the basis of the Christian faith, or which contain some of its strongest moral and religious lessons. The Hebrews, cradled in adversity, holding the elements of divine truth and inspiration, transmitted their faith unchanged from generation to generation, and at last gave to the world its truest faith before the time of their final dispersion. The history of Christ, if rightly presented, cannot fail to enlist the interest and sympathy of the smallest child. The purity, simplicity, and gentleness of his character appeal forcibly to the young. From the teachings of the Bible the child may be led to a true conception of the world in which he is placed; of his duties to his fellows, to his country, and to God.

**Suggestive Devotional Readings.**—The following short extracts from Scripture are examples of appropriate selections for devotional use. The number of such may be indefinitely extended.<sup>1</sup>

Blessed are the poor in spirit : for theirs is the kingdom of heaven.

Blessed are they that mourn : for they shall be comforted.

Blessed are the meek : for they shall inherit the earth.

Blessed are they which do hunger and thirst after righteousness : for they shall be filled.

Blessed are the merciful : for they shall obtain mercy.

Blessed are the pure in heart : for they shall see God.

Blessed are the peacemakers : for they shall be called the children of God.

Blessed are they which are persecuted for righteousness' sake : for theirs is the kingdom of heaven.

Blessed are ye, when men shall revile you, and persecute you, and say all manner of evil against you falsely, for my sake.

Rejoice and be exceeding glad : for great is your reward in heaven : for so persecuted they the prophets which were before you.

— Matthew v. 3-12.

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<sup>1</sup> Morris's *Scripture Readings* will be found an excellent manual of Bible readings for general exercises in the school.

Though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass, or a tinkling cymbal. And though I have the gift of prophecy, and understand all mysteries, and all knowledge; and though I have all faith, so that I could remove mountains, and have not charity, I am nothing. And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing. Charity suffereth long, and is kind; charity envieth not; charity vaunteth not itself, is not puffed up, doth not behave itself unseemly, seeketh not her own, is not easily provoked, thinketh no evil; rejoiceth not in iniquity, but rejoiceth in the truth; beareth all things, believeth all things, hopeth all things, endureth all things. Charity never faileth: but whether there be prophecies, they shall fail; whether there be tongues, they shall cease; whether there be knowledge, it shall vanish away. For we know in part, and we prophesy in part. But when that which is perfect is come, then that which is in part shall be done away. When I was a child, I spake as a child, I understood as a child, I thought as a child: but when I became a man, I put away childish things. For now we see through a glass, darkly; but then face to face: now I know in part; but then I shall know even as also I am known. And now abideth faith, hope, and charity, these three, but the greatest of these is charity.

— I Corinthians xiii.

**Various Ends of Bible Reading.** — While the fact may be regretted, it is unquestionably true that in a great number of public schools the regular reading of a portion of Scripture purely as an act of devotion is deemed impracticable or inexpedient, for various reasons. It does not follow, however, that Bible teachings are to be eliminated from such schools. A volume so vast, so incomparable, so varying in its adaptation, can be used extensively in other ways. The value of its history, the grandeur of its poetry, the aptness of its parables, the sententiousness of its proverbs, the moral force of its narratives, render it an inexhaustible treasure-house of which the teacher may avail himself.

The English Bible is a model of pure and strong composition, and its constant use by the English-speaking race has been one of the most active and fruitful agencies in preserving to us the purity and strength of our language.

Toward the better style of English of an earlier day there is now a strong tendency in our current literature. This trend, most pronounced in the poems of William Morris and Sir Edwin Arnold, is discernible in nearly all the notable English and American authors of the closing years of the nineteenth century. In our colleges and in our common schools as well, the study of literature is directed to the inculcation of the purer and stronger English from which we have drifted away. From the standpoint of a purely secular culture, the great value of the Bible as an educator will be apparent to every teacher.

However used, the Bible should be read, quoted, or mentioned always with reverence, and without disparagement or flippancy. If not read regularly as an act of devotion, it should be read at times, perhaps in connection with classic authors; and indeed, its employment for moral, literary, and historical ends does not necessarily depend upon its use in religious exercises. Morning readings from the Bible or from the classics should be brief, well chosen, and varied both in subject and in manner, in order to avoid the semblance of perfunctoriness, and to retain the interest of the school.

**Historical and Literary Parallelisms in the Bible.**—The Scriptures abound in narrations and descriptions which have become proverbial; in expressions which have added force and meaning to our language; in delineations of character which are reflected in the history of the world. A few instances of historical and literary parallelisms of the Bible will indicate the manner in which the book may be used for illustration and comparison.

1. The familiar anecdote of Cornelia, the virtuous Roman matron, daughter of Scipio and mother of the Gracchi, is beautiful enough to have been itself a Bible story. This noblest of all Roman ladies, when left a widow, devoted herself to the training of her children. When a wealthy friend displayed to her with pride a casket of rare gems, Cornelia

laid her hands upon her two sons (afterwards famous in the cause of the people), and said :

“ *These are my jewels.*”

A similar thought is expressed in the Bible :

Then they that feared the Lord spake often one to another ; and the Lord harkened, and heard it, and a book of remembrance was written before him for them that feared the Lord, and that thought upon his name. And they shall be mine, saith the Lord of hosts, in that day when I make up my jewels.

— Malachi iii. 16, 17.

An old melody formerly sung very generally in American schools presents the same thought. It begins :

When He cometh, when He cometh  
To make up His jewels,  
All His jewels, precious jewels,  
His loved and His own —  
Like the stars of the morning,  
His bright crown adorning,  
They shall shine in their beauty,  
Bright gems for His crown.

2. The choice of Hercules is a favorite narration of Grecian mythology. It is thus related by Dwight :

Hercules one day betook himself to a lonely spot, to muse undisturbed on his future life and fate ; and seating himself on a crossway he sank into deep reflection. On this occasion two females appeared to him, the one of whom was Luxury, and the other Virtue. Each endeavored to win the youth to her interest — Luxury, by promising him all the enjoyment of a cheerful, careless life, if he would follow her ; Virtue, by announcing to him troublesome and laborious days, but afterwards glory and immortality, if he would choose her for his guide in the path of life. “ Thee will I follow ; to thee devote my life,” exclaimed the youth, with glowing heart, grasping at the same time the hand of Virtue ; and he followed her with firm step, resolved to endure patiently every trial that awaited him, to bear every burden that should fall to his lot, and to shun no labor that should be appointed him, however difficult the task might be.

The story calls to mind the choice of Solomon, which is told in the following notable extract :

In that night did God appear unto Solomon, and said unto him, Ask what I shall give thee. And Solomon said unto God, Thou hast shewed great mercy unto David my father, and hast made me to reign in his stead. Now, O Lord God, let thy promise unto David my father be established : for thou hast made me king over a people like the dust of the earth in multitude. Give me now wisdom and knowledge, that I may go out and come in before this people ; for who can judge this thy people, that is so great ? And God said to Solomon, Because this was in thine heart, and thou hast not asked riches, wealth, or honor, nor the life of thine enemies, neither yet hast asked long life ; but hast asked wisdom and knowledge for thyself, that thou mayest judge my people, over whom I have made thee king ; Wisdom and knowledge is granted unto thee ; and I will give thee riches, and wealth, and honor, such as none of the kings have had that have been before thee, neither shall there any after thee have the like. — II Chronicles ii. 7-12.

How deeply Solomon valued this gift of wisdom appears from the constant reference to it in the Proverbs attributed to him, of which the following are examples :

My son, if thou wilt receive my words, and hide my commandments with thee ; so that thou incline thine ear unto wisdom, and apply thine heart to understanding ; yea, if thou criest after knowledge, and liftest up thy voice for understanding ; if thou seekest her as silver, and searchest for her as for hid treasures ; then shalt thou understand the fear of the Lord, and find the knowledge of God.

— Prov. ii. 1-5.

Happy is the man that findeth wisdom, and the man that getteth understanding. For the merchandise of it is better than the merchandise of silver, and the gain thereof than fine gold. She is more precious than rubies ; and all the things thou canst desire are not to be compared with her. Length of days is in her right hand ; and in her left hand riches and honor. Her ways are ways of pleasantness, and all her paths are peace.

— Prov. iii. 13-17.

Doth not wisdom cry ? and understanding put forth her voice ? She standeth in the top of high places, by the way in the places of the paths. She crieth at the gates, at the entry of the city, at the coming in at the doors. Unto you, O men, I call ; and my voice is to the sons of man. O ye simple, understand wisdom : and, ye fools, be ye of an



understanding heart. Hear; for I will speak of excellent things; and the opening of my lips shall be right things. For my mouth shall speak truth; and wickedness is an abomination to my lips. All the words of my mouth are in righteousness; there is nothing froward or perverse in them. They are all plain to him that understandeth, and right to them that find knowledge. Receive my instruction, and not silver; and knowledge rather than choice gold. For wisdom is better than rubies; and all the things that may be desired are not to be compared to it. I wisdom dwell with prudence, and find out knowledge of witty inventions. The fear of the Lord is to hate evil: pride, and arrogancy, and the evil way, and the froward mouth, do I hate. Counsel is mine, and sound wisdom: I am understanding; I have strength. By me kings reign, and princes decree justice. By me princes rule, and nobles, even all the judges of the earth. I love them that love me; and those that seek me early shall find me.

—Prov. viii. 1-17.

3. The story of the Roman Horatius, who defended the bridge against the Etruscans, is the subject of one of Macaulay's stirring *Lays of Ancient Rome*. A like instance of heroism is shown in the following narrative:

And Jonathan said to the young man that bare his armor, Come and let us go over unto the garrison of these uncircumcised: it may be that the Lord will work for us; for there is no restraint to the Lord to save by many or by few. And his armor-bearer said unto him, Do all that is in thy heart: turn thee; behold, I am with thee according to thy heart. Then said Jonathan, Behold, we will pass over unto these men, and we will discover ourselves unto them. If they say thus unto us, Tarry until we come to you; then we will stand still in our place, and will not go up unto them. But if they say thus, Come up unto us; then we will go up: for the Lord hath delivered them into our hand; and this shall be a sign unto us. And both of them discovered themselves unto the garrison of the Philistines: and the Philistines said, Behold, the Hebrews come forth out of the holes where they had hid themselves. And the men of the garrison answered Jonathan and his armor-bearer, and said, Come up to us, and we will shew you a thing. And Jonathan said unto his armor-bearer, Come up after me: for the Lord hath delivered them into the hand of Israel. And Jonathan climbed up upon his hands and upon his feet, and his armor-bearer after him; and they fell before Jonathan; and his armor-bearer slew after him.

—I Samuel xiv. 6-13.

Upon this account is based the familiar song, *Only an Armor-bearer*. There is a moral force in the ringing chorus:

Surely the Captain may depend on me,  
Though but an armor-bearer I may be.

4. A very notable parallelism is found in a portion of the *Book of Isaiah* and the Fourth Eclogue of Vergil, entitled *Pollio*. The remarkable correspondence of the imagery in these compositions never has been satisfactorily explained, though it is not impossible that Vergil may have seen a Greek copy of the Prophet's writings. It is interesting to compare such passages as the following:

And there shall come forth a rod out of the stem of Jesse, and a branch shall grow out of his roots: and the spirit of the Lord shall rest upon him, the spirit of wisdom and understanding, the spirit of counsel and might, the spirit of knowledge and of the fear of the Lord; and shall make him of quick understanding in the fear of the Lord; and he shall not judge after the sight of his eyes, neither reprove after the hearing of his ears. But with righteousness shall he judge the poor, and reprove with equity for the meek of the earth; and he shall smite the earth with the rod of his mouth, and with the breath of his lips shall he slay the wicked. And righteousness shall be the girdle of his loins, and faithfulness the girdle of his reins. The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fatling together; and a little child shall lead them. And the cow and the bear shall feed; their young ones shall lie down together; and the lion shall eat straw like the ox. And the sucking child shall play on the hole of the asp, and the weaned child shall put his hand on the cockatrice' den. They shall not hurt nor destroy in all my holy mountain; for the earth shall be full of the knowledge of the Lord, as the waters cover the sea.

— Isaiah xi. 1-9.

Then the eyes of the blind shall be opened, and the ears of the deaf shall be unstopped. Then shall the lame man leap as an hart, and the tongue of the dumb sing; for in the wilderness shall waters break out, and streams in the desert. And the parched ground shall become a pool, and the thirsty land springs of water; in the habitation of dragons, where each lay, shall be grass with reeds and rushes. And an highway shall be there, and a way, and it shall be called The

way of holiness ; the unclean shall not pass over it ; but it shall be for those : the wayfaring men, though fools, shall not err therein. No lion shall be there, nor any ravenous beast shall go up thereon, it shall not be found there ; but the redeemed shall walk there : And the ransomed of the Lord shall return, and come to Zion with songs and everlasting joy upon their heads : they shall obtain joy and gladness, and sorrow and sighing shall flee away. — *Isaiah xxxv. 5–10.*

At last they dawn, those better days, so long  
 Prefigured in the old Cumæan song ;  
 Fresh as the dew of earth's primeval morn,  
 Of this great series, the first age is born :  
 The lost Astræa greeting us again,  
 The olive and the just Saturnian reign ;  
 Already the first fruit is largely given,  
 And a new progeny descends from heaven,  
 The links of iron ages to destroy  
 (Thou, Virgin, ever helpful, speed the boy),  
 And with a golden race to fill the way  
 From Nile to Thulè ; give to him the day,  
 Purest Lucina ; circling time explains  
 The Sibyl, and thy own Apollo reigns.  
 This Pollio's favored consulate must prove,  
 When the great calends will begin to move,  
 And fraud, at his rebuke, and malice fled,  
 Release the nations from perpetual dread.  
 The youth himself will their divinity  
 Partake, when gods and heroes he shall see,  
 And they intent his providence regard,  
 The while, with gentle sway and just award,  
 And all his father's virtues newly tried,  
 An ever troubled world is pacified.  
 Now, fairest boy, will the new teeming earth  
 No culture wait, but pour to make thee mirth ;  
 As lays of offering she can soonest bear,  
 Wild nard and errant ivy everywhere ;  
 And with the Egyptian lily twined, in play,  
 Laughing Acanthus ; now the ewes will stray  
 Untended, and at eve the goats come home  
 Heavy with fragrant milk ; the herds may roam  
 Loosely at will, nor even need to fear  
 In thickets the great lion crouching near.

## MORNING EXERCISES

The very cradle quickens, osiers loose  
To tendrils turn with flowery shoots diffuse.  
A softer green the thymy ground puts forth  
Nor lavish blossom dreads the sudden North.  
The serpent now shall die, and the false weed  
Of poison die, each healing leaf succeed,  
Common as grass the balm of Syria give  
Her fragrance, and the sick who taste shall live.  
No harrows then the generous glebe will brook,  
Nor purple vintages the pruning hook ;  
The sturdy plowman from his oxen now  
Loosens the yoke ; no fallows need the plow.

— From Vergil's *Pollio*.

Pope's noble Eclogue, *The Messiah*, has been based upon both the foregoing selections. Its author owes much to the inspiration derived from the originals, and in this poem has risen far above his usual style. The beginning of *The Messiah* is as follows :

O Thou my voice inspire,  
Who touched Isaiah's hallowed lips with fire !  
Rapt into future times, the bard begun :  
A Virgin shall conceive, a Virgin bear a Son !  
From Jesse's root behold a branch arise,  
Whose sacred flower with fragrance fills the skies :  
The ethereal spirit o'er its leaves shall move,  
And on its top descends the mystic dove.  
Ye heavens, from high the dewy nectar pour,  
And in soft silence shed the kindly shower !  
The sick and weak the healing plant shall aid,  
From storms a shelter, and from heat a shade.  
All crimes shall cease, and ancient fraud shall fail ;  
Returning Justice lift aloft her scale ;  
Peace o'er the world her olive wand extend,  
And white-robed Innocence from heaven descend.  
Swift fly the years, and rise the expected morn !  
Oh spring to light, auspicious Babe, be born !  
See Nature hastes her earliest wreaths to bring,  
With all the incense of the breathing spring :  
See lofty Lebanon his head advance,  
See nodding forests on the mountains dance ;

See spicy clouds from lowly Saron rise,  
 And Carmel's flowery top perfumes the skies !  
 Hark ! a glad voice the lonely desert cheers ;  
 Prepare the way ! a God, a God appears :  
 A God, a God ! the vocal hills reply,  
 The rocks proclaim the approaching Deity.  
 Lo, earth receives him from the bending skies !  
 Sink down, ye mountains, and ye valleys, rise ;  
 With heads declined, ye cedars, homage pay ;  
 Be smooth, ye rocks ; ye rapid floods, give way ;  
 The Saviour comes, by ancient bards foretold !  
 Hear him, ye deaf, and all ye blind, behold !  
 He from thick films shall purge the visual ray,  
 And on the sightless eyeball pour the day ;  
 'Tis he the obstructed paths of sound shall clear,  
 And bid new music charm the unfolding ear ;  
 The dumb shall sing, the lame his crutch forego,  
 And leap exulting like the bounding roe.  
 No sigh, no murmur the wide world shall hear,  
 From every face he wipes off every tear.  
 In adamant chains shall Death be bound,  
 And Hell's grim tyrant feel the eternal wound.

An exercise like the foregoing, presupposing on the part of the pupils an ability to appreciate the rhetorical merits of the diction and the parallelisms of the different compositions, is adapted especially to the more advanced classes. An exercise so extended may be advantageously divided among two or more readers.

5. A remarkably interesting parallelism is to be found in Paul's *Epistle to Philemon*, in behalf of the runaway slave, Onesimus, and the epistle of the younger Pliny to his friend Sabianus, which was written for a like purpose, and under similar circumstances. A comparison of these famous epistles will prove of special interest and value to students of the classics, but will be appreciated also by the school generally, since the compared epistles are plain of comprehension and are highly significant in their contrast. "The letter of Pliny," says Canon Farrar, "is the letter of an ex-

cellent pagan ; but the differences which separate the pagan from the Christian stand out in every line."

Onesimus has been compared to the Marcus Dama described in the *Fifth Satire* of Persius, which fact will be of interest to the classical students who read the latter.

**Biblical Subjects of Poems.** — Many incidents of the Bible narrative have been made the themes of noble poems by which the English literature has been enriched. The effect of each is heightened by the reading of both at one time, where they are used in morning exercises of the school. A few examples of these will show how they may be utilized for this purpose.

1. Jacob's dream at Bethel is one of the most beautiful of the Old Testament narrations, and has been the theme of innumerable compositions in nearly all languages.

And Jacob went out from Beer-sheba, and went toward Haran. And he lighted upon a certain place, and tarried there all night, because the sun was set ; and he took of the stones of that place, and put them for his pillows, and lay down in that place to sleep. And he dreamed, and behold a ladder set up on the earth, and the top of it reached to heaven : and behold the angels of God ascending and descending on it. And, behold, the Lord stood above it, and said, I am the Lord God of Abraham thy father, and the God of Isaac : the land whereon thou liest, to thee will I give it, and to thy seed ; and thy seed shall be as the dust of the earth ; and thou shalt spread abroad to the west, and to the east, and to the north, and to the south : and in thee and in thy seed shall all the families of the earth be blessed. And, behold, I am with thee, and will keep thee in all places whither thou goest, and will bring thee again into this land ; for I will not leave thee, until I have done that which I have spoken to thee of. And Jacob awaked out of his sleep, and he said, Surely the Lord is in this place ; and I knew it not. And he was afraid, and said, How dreadful is this place ! this is none other but the house of God, and this is the gate of heaven. And Jacob rose up early in the morning, and took the stone that he had put for his pillows, and set it up for a pillar, and poured oil upon the top of it. And he called the name of that place Beth-el : but the name of that city was called Luz at the first. And Jacob vowed a vow, saying, If God will be with me, and will keep me in

this way that I go, and will give me bread to eat, and raiment to put on, so that I come again to my father's house in peace ; then shall the Lord be my God. And this stone, which I have set for a pillar, shall be God's house : and of all that thou shalt give me I will surely give the tenth unto thee.

— Genesis xxviii. 10-22.

It suggests the following stanza of a familiar hymn :

Though, like the wanderer,  
The sun gone down,  
Darkness be over me,  
My rest a stone,  
Yet in my dreams I'd be  
Nearer, my God, to Thee,  
Nearer to Thee.

A characteristic poem from Lucy Larcom, based upon the same narration, contains these stanzas :

When Jacob slept in Bethel, and there dreamed  
Of angels ever climbing and descending  
A ladder, whose last round of splendor seemed  
With glory of the Ineffable Presence blending,  
The place grew sacred to his reverent thought.  
He said : "Lo, God is here, I knew it not."

And wherefore did they fold their wings of light,  
Of swiftness, and of strength, those beings holy,  
And up to dawn celestial, through earth's night,  
Like mortals, step by step, go toiling slowly ?  
Was it to teach themselves the painful way  
Man's feet must take to their familiar day ?

Or was it that the traveler, laid asleep  
On his stone pillow, with an inward seeing,  
Should learn how mightiest spirits reach the steep  
And glorious possibilities of being —  
Not by a visionary flight sublime,  
But up the foot-worn ladder rounds of time ?

Wherever upward, even the lowest round,  
Man by a hand's help lifts his feeble brother,

There is a house of God, and holy ground :  
The gate of Heaven is Love ; there is none other.  
When generous act blooms from unselfish thought,  
The Lord is with us, though we know it not.

2. The interview of Saul with the Witch of Endor calls vividly to mind the divination of Shakespeare's *Macbeth*, through the agency of the witches. Saul's recourse to the supernatural to learn his fate, is thus described.

Then said Saul unto his servants, Seek me a woman that hath a familiar spirit, that I may go to her, and inquire of her. And his servants said to him, Behold there is a woman that hath a familiar spirit at En-dor. And Saul disguised himself, and put on other raiment, and he went, and two men with him, and they came to the woman by night : and he said, I pray thee, divine unto me by the familiar spirit, and bring me him up, whom I shall name unto thee. And the woman said unto him, Behold, thou knowest what Saul hath done, how he hath cut off those that have familiar spirits, and the wizards out of the land : wherefore then layest thou a snare for my life, to cause me to die ? And Saul sware to her by the Lord, saying, As the Lord liveth, there shall no punishment happen to thee for this thing. Then said the woman, Whom shall I bring up unto thee ? And he said, Bring me up Samuel. And when the woman saw Samuel, she cried with a loud voice : and the woman spake to Saul, saying, Why hast thou deceived me ? for thou art Saul. And the king said unto her, Be not afraid : for what sawest thou ? And the woman said unto Saul, I saw gods ascending out of the earth. And he said unto her, What form is he of ? And she said, An old man cometh up ; and he is covered with a mantle. And Saul perceived that it was Samuel, and he stooped with his face to the ground, and bowed himself. And Samuel said to Saul, Why hast thou disquieted me, to bring me up ? And Saul answered, I am sore distressed ; for the Philistines make war against me, and God is departed from me, and answereth me no more, neither by prophets, nor by dreams : therefore I have called thee, that thou mayest make known unto me what I shall do. Then said Samuel, Wherefore then dost thou ask of me, seeing the Lord is departed from thee, and is become thine enemy ? And the Lord hath done to him, as he spake by me : for the Lord hath rent the kingdom out of thine hand, and given it to thy neighbor, even to David : because thou obeyedst not the voice of the Lord, nor executedst his fierce wrath upon Amalek, therefore hath the Lord done this thing unto thee this day. Moreover



the Lord will also deliver Israel with thee into the hand of the Philistines ; and to-morrow shalt thou and thy sons be with me : the Lord also shalt deliver the host of Israel into the hand of the Philistines.

— I Samuel xxviii. 7-19.

Byron's poem, *Saul*, is a paraphrase of this narration :

Thou whose spell can raise the dead,  
 Bid the prophet's form appear,  
 "Samuel, raise thy buried head !  
 King, behold the phantom seer !"

Earth yawned ; he stood the center of a cloud ;  
 Light changed its hue, retiring from his shroud.  
 Death stood all glassy in his fixed eye ;  
 His hand was withered, and his veins were dry ;  
 His foot, in bony whiteness, glittered there,  
 Shrunk and sinewless, and ghastly bare ;  
 From lips that moved not and unbreathing frame,  
 Like caverned winds, the hollow accents came.  
 Saul saw, and fell to earth, as falls the oak,  
 At once, and blasted by the thunder-stroke.

" Why is my sleep disquieted ?  
 Who is he that calls the dead ?  
 Is it thou, O King ? Behold,  
 Bloodless are these limbs, and cold :  
 Such are mine ; and such shall be  
 Thine to-morrow, when with me :  
 Ere the coming day is done,  
 Such shalt thou be, such thy son.  
 Fare thee well, but for a day,  
 Then we mix our moldering clay.  
 Thou, thy race, lie pale and low,  
 Pierced by shafts of many a bow ;  
 And the falchion by thy side  
 To thy heart thy hand shall guide :  
 Crownless, breathless, headless fall,  
 Son and sire, the house of Saul !"

3. Another Hebrew poem of Byron relates the destruction of the army of Sennacherib (which seems to have been anni-

hilated in camp by a poisonous wind), in answer to the prayer of Hezekiah, king of Judah. The Bible account is as follows :

Therefore thus saith the Lord concerning the king of Assyria, He shall not come into this city, nor shoot an arrow there, nor come before it with shield, nor cast a bank against it. By the way that he came, by the same shall he return, and shall not come into this city saith the Lord. For I will defend this city, to save it, for mine own sake, and for my servant David's sake. And it came to pass that night, that the angel of the Lord went out, and smote in the camp of the Assyrians an hundred fourscore and five thousand : and when they arose early in the morning, behold, they were all dead corpses.

— II Kings xix. 32-35.

This is the poem :

The Assyrian came down like the wolf on the fold,  
And his cohorts were gleaming in purple and gold ;  
And the sheen of their spears was like stars on the sea,  
When the blue wave rolls nightly on deep Galilee.

Like the leaves of the forest when Summer is green,  
That host with their banners at sunset were seen :  
Like the leaves of the forest when Autumn hath blown,  
That host on the morrow lay withered and strown.

For the Angel of Death spread his wings on the blast,  
And breathed in the face of the foe as he passed ;  
And the eyes of the sleepers waxed deadly and chill,  
And their hearts but once heaved, and forever grew still !

And there lay the steed with his nostril all wide,  
But through it there rolled not the breath of his pride ;  
And the foam of his gasping lay white on the turf,  
And cold as the spray of the rock-beating surf.

And there lay the rider distorted and pale,  
With the dew on his brow, and the rust on his mail ;  
And the tents were all silent, the banners alone,  
The lances uplifted, the trumpet unblown.

And the widows of Ashur are loud in their wail,  
And the idols are broke in the temple of Baal !  
And the might of the Gentile, unsmote by the sword,  
Hath melted like snow in the glance of the Lord !

4. The overture of angels, which announced to the shepherds of Judea the birth of the Saviour, has been a fruitful theme for poets. The original narrative by St. Luke possesses the very essence of poetry.

And there were in the same country shepherds abiding in the field, keeping watch over their flock by night. And, lo, the angel of the Lord came upon them, and the glory of the Lord shone round about them; and they were sore afraid. And the angel said unto them, Fear not; for, behold, I bring you good tidings of great joy, which shall be to all people. For unto us is born this day in the city of David a Saviour, which is Christ the Lord. And this shall be a sign unto you; Ye shall find the babe wrapped in swaddling clothes, lying in a manger. And suddenly there was with the angel a multitude of the heavenly host praising God, and saying, Glory be to God in the highest, and on earth peace, good will toward men. And it came to pass, as the angels were gone away from them into heaven, the shepherds said one to another, Let us now go even unto Bethlehem, and see this thing which is come to pass, which the Lord hath made known unto us. And they came with haste, and found Mary and Joseph, and the babe lying in a manger.

—St. Luke ii. 8-16.

Milton's *Ode on the Morning of Christ's Nativity* was written while the author was in college, in the year 1629. It is one of the most severely classical productions in form and thought in the English language. Parts of the hymn only are quoted here:

It was the winter wild,  
While the heaven-born child  
All meanly wrapt in the rude manger lies;  
Nature, in awe to him,  
Had doffed her gaudy trim,  
With her great Master so to sympathize.

No war, or battle's sound,  
Was heard the world around.  
The idle spear and shield were high up hung;  
The hookèd chariot stood  
Unstained with hostile blood.  
The trumpet spake not to the armèd throng;

And kings sat still with awful eye,  
As if they surely knew their sovereign Lord was by.

But peaceful was the night,  
Wherein the Prince of Light

His reign of peace upon the earth began.  
The winds, with wonder whist,  
Smoothly the waters kissed,

Whispering new joys to the mild ocean,  
Who now hath quite forgot to rave,  
While birds of calm sit brooding on the charmed wave.

The shepherds on the lawn,  
Or ere the point of dawn,

Sat simply chatting in a rustic row.  
Full little thought they then  
That the mighty Pan

Was kindly come to live with them below;  
Perhaps their loves, or else their sheep,  
Was all that did their silly <sup>1</sup> thoughts so busy keep.

When such music sweet  
Their hearts and ears did greet,

As never was by mortal finger strook;  
Divinely-warbled voice  
Answering the stringèd noise,

As all their souls in blissful rapture took.  
The air, such pleasure loth to lose,  
With thousand echoes still prolongs each heavenly close.

Such music (as 'tis said)  
Before was never made,

But when of old the sons of morning sung,  
While the Creator great  
His constellations set,

And the well-balanced world on hinges hung,  
And cast the dark foundations deep,  
And bid the weltering waves their oozy channel keep.

Ring out, ye crystal spheres!  
Once bless our human ears,

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<sup>1</sup> Simple.

If ye have power to touch our senses so ;  
 And let your silver chime  
 Move in melodious time ;  
     And let the bass of heaven's deep organ blow ;  
 And, with your ninefold harmony,  
 Make up full consort to the angelic symphony.

A modern Christmas Carol, by Dr. J. G. Holland, begins :

There's a song in the air,  
 There's a star in the sky,  
 There's a maiden's low prayer,  
 There's a baby's sweet cry ;  
 And the star rains its fire  
 While the beautiful sing,  
 For the manger of Bethlehem  
 Cradles a King.

There's a tumult of joy  
 O'er the wonderful birth,  
 For the maiden's sweet boy  
 Is the Lord of the Earth ;  
 And the star rains its fire  
 While the beautiful sing,  
 For the manger of Bethlehem  
 Cradles a King.

5. The song of Moses and the Children of Israel is one of the most famous anthems of antiquity. When it was uttered Moses had but just led the Children of Israel from Egypt. Behind them were the years of oppression, the miserable life of the slave. The Egyptians were now overwhelmed in the sea. Life and hope opened gloriously for the emancipated race. The enthusiastic people burst forth in the following song of rejoicing :

I will sing unto the Lord for he hath triumphed gloriously : the horse and his rider hath he thrown into the sea. The Lord is my strength and song, and he is become my salvation : he is my God and I will prepare him an habitation : my father's God, and I will exalt him. The Lord is a man of war, the Lord is his name. Pharaoh's chariots and his host hath he cast into the sea ; his chosen captains

also are drowned in the Red sea. The depths have covered them : they sank into the bottom as a stone. Thy right hand, O Lord, is become glorious in power : thy right hand, O Lord, hath dashed in pieces the enemy. And in the greatness of thine excellency thou hast overthrown them that rose up against thee : thou sentest forth thy wrath, which consumed them as stubble. And with a blast of thy nostrils the waters were gathered together, the floods stood upright as an heap, and the depths were congealed in the heart of the sea. The enemy said I will pursue, I will overtake, I will divide the spoil, I will draw my sword, my hand shall destroy them. Thou didst blow with thy wind, the sea covered them : they sank as lead in the mighty waters. Who is like unto thee, O Lord, among the gods ? Who is like thee, glorious in holiness, fearful in praises, doing wonders ? Thou stretchedst out thy right hand, the earth swallowed them. Thou in thy mercy hast led forth the people which thou hast redeemed : thou hast guided them in thy strength unto thy holy habitation. The people shall hear and be afraid : sorrow shall take hold on the inhabitants of Palestina. Then the dukes of Edom shall be amazed ; the mighty men of Moab, trembling shall take hold upon them ; all the inhabitants of Canaan shall melt away. Fear and dread shall fall upon them ; by the greatness of thine arm they shall be as still as a stone ; till thy people pass over, O Lord, till thy people pass over, which thou hast purchased. Thou shalt bring them in, and plant them in the mountain of thine inheritance, in the place, O Lord, which thou hast made for thee to dwell in ; in the sanctuary, O Lord, which thy hands have established. The Lord shall reign for ever and ever. For the horse of Pharaoh went in with his chariots and with his horsemen into the sea, and the Lord brought again the waters of the sea upon them ; but the children of Israel went on dry land in the midst of the sea.

—Exodus xv. 1-19.

This song of rejoicing has been thus paraphrased by Thomas Moore :

Sound the loud timbrel o'er Egypt's dark sea !  
Jehovah hath triumphed, his people are free.  
Sing — for the pride of the tyrant is broken,  
His chariots, his horsemen all splendid and brave,  
How vain was their boast ! — for the Lord hath but spoken,  
And chariots and horsemen are sunk in the wave.  
Sound the loud timbrel o'er Egypt's dark sea !  
Jehovah hath triumphed, his people are free.

Praise to the conqueror, praise to the Lord !  
 His word was our arrow, his breath was our sword !  
 Who shall return to tell Egypt the story  
 Of those she sent forth in the hour of her pride ?  
 For the Lord hath looked out from his pillar of glory,  
 And all her brave thousands are dashed in the tide.  
 Sound the loud timbrel o'er Egypt's dark sea !  
 Jehovah hath triumphed, his people are free.

6. The story of Queen Athaliah, is the subject of the tragedy of *Athalie* by the great French poet Racine. The Bible narrative is as follows :

And when Athaliah the mother of Ahaziah saw that her son was dead, she arose and destroyed all the seed royal. But Jehosheba, the daughter of King Joram, sister of Ahaziah, took Joash the son of Ahaziah, and stole him from among the king's sons which were slain ; and they hid him, even him and his nurse, in the bedchamber from Athaliah, so that he was not slain. And he was with her hid in the house of the Lord six years. And Athaliah did reign over the land. And the seventh year Jehoiada sent and fetched the rulers over hundreds, with the captains and the guard, and brought them to him into the house of the Lord, and made a covenant with them, and took an oath of them in the house of the Lord, and shewed them the king's son. And he commanded them, saying, This is the thing that ye shall do : A third part of you that enter in on the sabbath shall even be keepers of the watch of the king's house ; and a third part shall be at the gate of Sur ; and a third part at the gate behind the guard : so shall ye keep the watch of the house, that it be not broken down. And two parts of all you that go forth on the sabbath, even they shall keep the watch of the house of the Lord about the king. And ye shall compass the king round about, every man with his weapons in his hand : and he that cometh within the ranges, let him be slain : and be ye with the king as he goeth out and as he cometh in. And the captains over the hundreds did according to all things that Jehoiada the priest commanded : and they took every man his men that were to come in on the sabbath, with them that should go out on the sabbath, and came to Jehoiada the priest. And to the captains over hundreds did the priest give king David's spears and shields, that were in the temple of the Lord. And the guard stood, every man with his weapons in his hand, round about the king, from the right corner of the temple to the left corner of the temple, along by the altar and the

temple. And he brought forth the king's son, and put the crown upon him, and gave him the testimony ; and they made him king, and anointed him ; and they clapped their hands, and said, God save the king. And when Athaliah heard the noise of the guard and of the people, she came to the people into the temple of the Lord. And when she looked, behold, the king stood by a pillar, as the manner was, and the princes and the trumpeters by the king, and all the people of the land rejoiced, and blew with trumpets ; and Athaliah rent her clothes, and cried, Treason, treason. But Jehoiada the priest commanded the captains of the hundreds, the officers of the host, and said unto them, Have her forth without the ranges ; and him that followeth her kill with the sword. For the priest had said, Let her not be slain in the house of the Lord. And they laid hands on her ; and she went by the way by the which the horses came into the king's house : and there was she slain. And Jehoiada made a covenant between the Lord and the king and the people, that they should be the Lord's people.

. — II Kings xi. 1-17.

Racine's tragedy was intended to be recited, rather than acted. The seventh scene of the second act constitutes an admirable dialogue for a class of pupils in French.

**A Notable Bible Poem.**—Much of the literature of the Old Testament is highly poetical, though possessing neither rhyme nor meter. The *Book of Job* is a very remarkable poem, and is possessed of great historical, dramatic, and literary interest. Various translations have been made of this poem. In some of these it appears in modern dress, with rhyme and meter. In others it has not these adornments, but is given something of the outward form of poetry by the arrangement of its paragraphs. From a recent poetical translation of the latter class, by Professor R. G. Moulton, the following selections are taken :

1. (*Job curses the day in which he was born, and regrets that he did not die at birth.*)

For now I should have lien down and been quiet ;  
I should have slept ; then had I been at rest.  
With kings and counselors of the earth,  
Which built solitary piles for themselves,



Or with princes that had gold,  
 Who filled their houses with silver ;  
 Or as an untimely birth I had not been ;  
 As infants which never saw light.  
 Where the wicked cease from troubling ;  
 Where the weary be at rest.  
 Where the prisoners are at ease together ;  
 They hear not the voice of the taskmaster,  
 The small and the great are there ;  
 And the servant is free from his master.  
 Wherefore is light given to him that is in misery,  
 And life unto the bitter in soul ?  
 Which long for death but it cometh not ;  
 And try for it more than for hid treasures :  
 Which rejoice exceedingly  
 And are glad when they can find the grave.  
 Why is light given to a man whose way is hid,  
 And whom God hath hedged in ?  
 For my sighing cometh before I eat,  
 And my roarings are poured out like water,  
 For the thing that I fear cometh upon me ;  
 And that which I am afraid of cometh unto me,  
 I am not at ease  
 Neither am I quiet,  
 Neither have I rest,  
 But trouble cometh.

2. (*Job answers the speech of Zophar.*)

Man that is born of woman  
 Is of few days and full of trouble ;  
 He cometh forth like a flower, and is cut down ;  
 He fleeth also as a shadow and continueth not.  
 And dost thou open thine eyes upon such an one,  
 And bringest me into judgment with thee ?  
 For there is hope of a tree, if it be cut down,  
 That it will sprout again,  
 And that the tender branch thereof will not cease ;  
 Though the root thereof wax old in the earth,  
 And the stock thereof die in the ground,  
 Yet through the scent of water it will bud,  
 And put forth boughs like a plant,

But man dieth and wasteth away,  
Yea, man giveth up the ghost, and where is he ?  
As the waters fail from the sea,  
And the river decayeth and drieth up,  
So man lieth down and riseth not :  
Till the heavens be no more,  
They shall not awake,  
Nor be roused out of their sleep.

3. (*Bildad speaks.*)

How long wilt thou speak these things ?  
How long shall the words of thy mouth be like a mighty wind ?  
Doth God pervert judgment ?  
Or doth the Almighty pervert justice ?  
Behold, God will not cast away a perfect man,  
Neither will he uphold the evil-doers,  
He will yet fill thy mouth with laughter,  
And thy lips with shouting.  
They that hate thee shall be clothed with shame.  
And the tent of the wicked shall be no more.

4. (*Job answers.*)

Of a truth I know that it is so ;  
But how can a man be just with God ?  
If he be pleased to contend with him,  
He cannot answer him one of a thousand.  
He is wise in heart and mighty in strength :  
Who hath hardened himself against him and prospered ?  
Which removeth the mountains and they know it not,  
When he overturneth them in his anger ;  
Which shaketh the earth out of her place,  
And the pillars thereof tremble.  
Which commandeth the sun and it riseth not ;  
And sealeth up the stars,  
Which alone stretcheth out the heavens,  
And treadeth upon the waves of the sea.  
Which maketh the Bear, Orion, and the Pleiades  
And the chambers of the south.  
Lo, he goeth by me and I see him not ;  
Behold he seizeth the prey, who can hinder him ?  
Who will say unto him, What doest thou ?

God will not withdraw his anger ;  
 The helpers of Rahab do stoop under him.  
 How much less shall I answer him,  
 And choose out my words to reason with him !

The sublime poem entitled *God*, by the Russian poet and statesman Derzhavin (1743-1816), while not based specifically upon any passage of Scripture, expresses the lofty idea of the Creator which the Bible inculcates throughout. An excellent English rendering of the poem is the following:

O Thou eternal One, whose presence bright  
 All space doth occupy, all motion guide, —  
 Unchanged through time's all-devastating flight,  
 Thou only God, there is no God beside.  
 Thou Being above all things, Mighty One,  
 Whom none can comprehend and none explore,  
 Who fillest existence with *Thyself* alone,  
 Embracing all, supporting, ruling o'er, —  
 Being whom we call God — and know no more.

In its sublime research, Philosophy  
 May measure out the ocean deep, may count  
 The sun's rays or the sands — but, God, for Thee  
 There is no weight nor measure ; none can mount  
 Up to Thy mysteries. Reason's brightest spark,  
 Though kindled by Thy light, in vain would try  
 To trace Thy counsels, infinite and dark ;  
 And thought is lost, ere thought can soar so high,  
 Even like past moments, in eternity.

Thou from primeval nothingness didst call,  
 First, chaos, then existence ; Lord, on Thee  
 Eternity had its foundation ; all  
 Sprung forth from Thee, — of light, joy, harmony,  
 Sole origin ; all life, all beauty Thine.  
 Thy word created all, and doth create.  
 Thy splendor fills all space with rays divine.  
 Thou art, and wert, and shalt be. Glorious, great,  
 Life-giving, life-sustaining Potentate.

Thy claims the unmeasured universe surround,  
Upheld by Thee, by Thee inspired with breath.  
Thou the beginning with the end hast bound,  
And beautifully mingled life and death.  
As sparks mount upwards from the fiery blaze,  
So suns are born, so worlds spring forth from Thee;  
And as the spangles in the sunny rays  
Shine round the silver snow, the pageantry  
Of heaven's bright army glitters in Thy praise.

A million torches lighted by Thy hand  
Wander unwearied through the blue abyss.  
They own Thy power, accomplish Thy command,  
All gay with life, all eloquent with bliss.  
What shall we call them? Piles of crystal light—  
A glorious company of golden streams—  
Lamps of celestial ether burning bright—  
Suns lighting systems with their joyous beams;  
But Thou to these art as the noon to night.

Yes, as a drop of water in the sea,  
All this magnificence in Thee is lost;  
What are ten thousand worlds compared to Thee?  
And what am I then? Heaven's unnumbered host,  
Though multiplied by myriads, and arrayed  
In all the glory of sublimest thought,  
Is but an atom in the balance weighed—  
Against Thy greatness is a cipher brought  
Against infinity. O what am I then? Naught!

Naught! Yet the effluence of Thy light divine,  
Pervading worlds, hath reached my bosom, too;  
Yes, in my spirit doth Thy spirit shine,  
As shines the sunbeam in a drop of dew.  
Naught! Yet I live, and on hope's pinions fly  
Eagerly towards Thy presence; for in Thee  
I live and breathe and dwell, aspiring high,  
Even to the throne of Thy Divinity.  
I am, O God, and surely Thou must be.

Thou art—directing, guiding all, Thou art.  
Direct my understanding, then, to Thee;  
Control my spirit, guide my wandering heart,  
Though but an atom midst immensity,

Still I am something fashioned by Thy hand.

I hold a middle rank 'twixt heaven and earth—  
On the last verge of mortal being stand—

Close to the realms where angels have their birth,  
Just on the boundaries of the spirit-land.

The chain of being is complete in me ;

In me is matter's last gradation lost ;  
And the next step is spirit—Deity.

I can command the lightning, and am dust.  
A monarch, and a slave ! A worm, a god !

Whence came I here, and how so marvelously  
Constructed and conceived ? Unknown. This clod  
Lives surely through some higher energy ;  
For of itself alone it could not be.

Creator, yes. Thy wisdom and Thy word

Created me. Thou source of life and good,  
Thou spirit of my spirit, and my Lord—

Thy light, Thy love, in their bright plenitude  
Filled me with an immortal soul, to spring

Over the abyss of death, and bade it wear  
The garments of eternal day, and wing

Its heavenly flight beyond this little sphere,  
Even to its source—to Thee, its Author, there.

O thoughts ineffable ! O visions blest !

Though worthless our conceptions all of Thee,  
Yet shall Thy shadowed image fill our breast,  
And waft its homage to Thy Deity.

God, thus alone my lonely thoughts can soar ;

Thus seek Thy presence, Being wise and good ;  
Midst Thy vast works admire, obey, adore ;  
And when the tongue is eloquent no more,  
The soul shall speak in tears of gratitude.

**Comments on the Readings.**—Comments on Scriptural readings in public schools are not always deemed desirable, or even permissible, owing to the opportunity which they offer to a zealous person for the inculcation of sectarian views. Where the comments are purely of an historical, literary, or moral character, they are, of course, unobjection-

able in themselves, and they may add greatly to the application and force of the reading. Thus the famous song of David, in the twenty-second chapter of II Samuel, is better appreciated when the circumstances of his life under which it was written are previously stated; and the song of triumph of the Children of Israel possesses a fuller significance when the scene of its composition is portrayed. Many passages of Scripture will possess little meaning when read apart from their context and historical setting.

In the public schools the question of comments upon the reading, like the question of devotional readings of any form, must be determined by circumstances, and will involve necessarily the exercise of good judgment.

**Other Forms of General Exercises.** — Generally the Scriptural readings will occupy only a portion of the time that may be profitably allotted to the morning exercises. To these readings may be added responsive quotations at roll call, a brief discussion of the press dispatches of the day, short historical or biographical sketches pertinent to some event of special interest at the time, and brief descriptions of any new discoveries or inventions of importance.

**Responsive Quotations.** — Some little time should be given by the teacher (especially at the outset) to the selection of the quotations, in order that no mere fragments of thought may be quoted, and that the selections may be representative of the author.

There are two ways in which the quotations may be arranged, either of which is good, and both of which should be followed alternately for the sake of variety. One of these arrangements is by authors, the other by subjects. The latter is the more difficult to follow, since it presupposes access to a considerable library, and some general acquaintance with authors. For the first method a few volumes of the complete works of one of the best authors will suffice. If the other plan be followed, the result will be a considerable acquaintance with the works of the authors selected.

**Quotations from Shakespeare.**—Let us suppose that on some previous occasion, the author's birthday perhaps, the pupils have learned something of Shakespeare; something of the history of the Elizabethan period; something of the influence which Shakespeare's plays have exerted upon the literature and thought of the world. In a few brief introductory remarks the teacher can present a picture of Shakespeare's home and its surroundings, together with some general characteristics of the English people of Shakespeare's day. If a specific play be chosen as the subject of the responsive readings, a brief account of the play and characterization of its leading personages will be appropriate. Then each pupil, in answering to his name in the roll call, may rise at his seat and repeat some well-known passage from the play or plays selected. It is often surprising and always very gratifying to note how generally and how quickly the pupils will become interested in the works thus quoted; how they will speculate upon the meaning or application of this or that passage; above all, how they will enjoy what they hear or read. Boys and girls of thirteen or fourteen years seem never to tire of Shakespeare. The following selections are suggestive of suitable material for responsive roll calls:

All that glisters is not gold.

The Devil can cite Scripture for his purpose.

It is a good divine that follows his own instructions.

—Fast find, fast bind.

A proverb never stale in thrifty mind.

They are as sick that surfeit with too much,  
As that they starve with nothing.

If to do were as easy as to know what were good to do, chapels had been churches and poor men's cottages princes' palaces.

An evil soul producing holy witness  
Is like a villain with a smiling cheek—  
A goodly apple rotten at the heart.

I hold the world but as the world, Gratiano,  
A stage where every man must play his part.

The quality of mercy is not strained ;  
It droppeth as the gentle rain from heaven  
Upon the place beneath. It is twice blest ;  
It blesseth him that gives and him that takes,  
'Tis mightiest in the mightiest ; it becomes  
The thronèd monarch better than his crown.  
His scepter shows the force of temporal power,  
The attribute to awe and majesty,  
Wherein doth sit the dread and fear of kings ;  
But mercy is above this scepterèd sway ;  
It is enthronèd in the hearts of kings,  
It is an attribute of God Himself ;  
And earthly power doth then show likest God's  
When mercy seasons justice.

Look how the floor of heaven  
Is thick inlaid with patines of bright gold.  
There's not the smallest orb which thou behold'st  
But in his motion like an angel sings,  
Still quiring to the young-eyed cherubims ;  
Such harmony is in immortal souls ;  
But whilst this muddy vesture of decay  
Doth grossly close it in, we cannot hear it.

The man that hath no music in his soul,  
Nor is not moved with concord of sweet sounds,  
Is fit for treasons, stratagems, and spoils.  
Let no such men be trusted.

How far that little candle throws his beams !  
So shines a good deed in a naughty world.

All things that are,  
Are with more spirit chasèd than enjoyed.

— *Merchant of Venice.*

New customs,  
Though they be never so ridiculous,  
Nay, let them be unmanly, yet are followed.

O how wretched  
Is that poor man that hangs on princes' favors !



Fling away ambition,  
By that sin fell the angels.  
Love thyself last : cherish those hearts that hate thee ;  
Still in thy right hand carry gentle peace  
To silence envious tongues.

Had I but served my God with half the zeal  
I served my king, he would not in mine age  
Have left me naked to mine enemies.

Men's evil manners live in brass : their virtues  
We write in water.

This is the state of man ; to-day he puts forth  
The tender leaves of hope, to-morrow blossoms  
And bears his blushing honors thick upon him :  
The third day comes a frost, a killing frost,  
And when he thinks, good, easy man, full surely  
His greatness is a-ripening — nips his root,  
And then he falls.

'Tis better to be lowly born  
And range with humble livers in content,  
Than to be perked up in a glistening grief  
And wear a golden sorrow.

— *Henry the Eighth.*

Brevity is the soul of wit.

Calumny will sear virtue itself.

Be thou chaste as ice, as pure as snow, thou shalt not escape  
calumny.

Those friends thou hast and their adoption tried,  
Grapple them to thy soul with hoops of steel.

This above all — To thine own self be true ;  
And it must follow as the night the day,  
Thou canst not then be false to any man.

Costly thy habit as thy purse can buy,  
But not expressed in fancy ; rich, not gaudy ;  
For the apparel oft proclaims the man.

Be not too lame, neither, but let your own discretion be your tutor ;  
suit the action to the word, the word to the action : with this especial  
observance, that you o'erstep not the modesty of nature.

— *Hamlet.*

O how full of briers is this working-day world.

I had rather have a fool to make me merry than experience to make me sad.

And this our life, exempt from public haunt,  
Finds tongues in trees, books in the running brooks,  
Sermons in stones, and good in everything.

All the world's a stage,  
And all the men and women merely players ;  
They have their exits and entrances,  
And one man, in his time, plays many parts.

— *As You Like It*.

Adversity's sweet milk, philosophy.

One pain is lessened by another's anguish,  
One desperate grief cures with another's languish.

Care keeps his watch on every old man's eye,  
And where care lodges sleep will never lie.

Nor aught so good but, strained from that fair use,  
Revolts from true birth, stumbling on abuse.

— *Romeo and Juliet*.

Best men are moulded out of faults.

Our doubts are traitors,  
And make us lose the good we oft might win,  
By fearing to attempt.

Man, proud man,  
Dressed in a little brief authority,  
Plays such fantastic tricks before high heaven,  
As make the angels weep.

— *Measure for Measure*.

Love all — trust a few — do wrong to none.

Praising what is lost  
Makes the remembrance dear.

Oft expectation fails, and most oft there  
Where it most promises.

— *All's Well That Ends Well*.

Tell the truth and shame the devil.

The better part of valor is discretion.

The blood more stirs  
To rouse a lion than to start a hare.

— *Henry the Fourth.*

One touch of nature makes the whole world kin.

The end crowns all :  
And that old common arbitrator, Time,  
Will one day end it.

— *Troilus and Cressida.*

Through tattered clothes small vices do appear ;  
Robes and furred gowns hide all. Plate sin with gold,  
And the strong lance of justice hurtless breaks ;  
Arm it in rags, a pigmy's straw doth pierce it.

— *King Lear.*

Cowards die many times before their death,  
The valiant never taste of death but once.

There is a tide in the affairs of men  
Which, taken at the flood, leads on to fortune ;  
Omitted, all the voyage of their life  
Is bound in shallows and in miseries.

— *Julius Cæsar.*

The sleeping and the dead are but as pictures.

Come what come may,  
Time and the hour runs through the roughest day.

— *Macbeth.*

Courage mounteth with occasion.

To gild refined gold, to paint the lily,  
Is wasteful and ridiculous excess.

— *King John.*

Glory is like a circle in the water,  
Which never ceases to enlarge itself  
Till, by broad spreading, it disperses to naught.

— *Henry the Sixth.*

Some Cupid kills with arrows, some with traps.

Doth not the appetite alter? A man loves the meat of his youth  
that he cannot endure in his age.

— *Much Ado about Nothing.*

They that stand high have many blasts to shake them,  
And if they fall, they dash themselves to pieces.

— *Richard the Third.*

As the sun breaks through the darkest clouds,  
So honor peereth in the meanest habit.

— *Taming of the Shrew.*

In nature there's no blemish but the mind,  
None can be called deformed but the unkind.

— *Twelfth Night.*

All places that the eye of heaven visits  
Are to a wise man ports and happy havens.

— *Richard the Second.*

Consideration, like an angel, came  
And whipped the offending Adam out of him.

— *Henry the Fifth.*

Sir, he hath never fed of the dainties that are bred in a book.

— *Love's Labor Lost.*

Misery acquaints a man with strange bedfellows.

— *The Tempest.*

Roses have thorns, and silver fountains mud.

— *Sonnets.*

**Periodical Summaries of Current History.** — A very valuable exercise for the opening of school is a general summary of current events of the day, week, or month. The subject is one of wide scope and may be extended indefinitely, according to the access which the pupils have to periodical literature, and to their general advancement and aptitude. In nearly every school some pupil will be found who is deeply interested in some recent discovery or invention. To him this subject may be assigned until others become equally interested and equally well informed. Important discoveries and inventions are constantly claiming

our attention. Very recently the chemists have announced the existence of two new elements—argon and helium. The announcement offered an opportunity, not only to interest the more advanced pupils possessing some knowledge of chemistry, but also to explain to younger pupils some of the properties of the air, and some mistaken notions which have been held concerning it. The increasing use of aluminum in the arts and manufactures, and the constantly extending employment of electricity as a means of motive power, may form the subject of interesting and profitable remarks addressed to the school in general. The recent opening of the Kiel canal in Germany afforded an opportunity for reviewing briefly the other great advancements in a similar line by various nations. The construction of the Chicago drainage canal, and the harnessing of the immense natural power of the Niagara River, are engineering feats of prodigious magnitude, which cannot fail to enlist the attention of pupils. The death of a noted man in the government service offers an opportunity for considering the office which he has filled, and its relation to the welfare of the state.

Valuable suggestions and material for exercises in the line of current history may be found in such periodicals as the *Review of Reviews*. Almost any standard newspaper can be utilized in this way.

In our day the common interests of the various nations have grown in magnitude with the increased facilities for communication, travel, and trade, until matters which in former times would have possessed but a local or sectional interest are now subjects of world-wide attention and concern. A disturbance of the normal or customary political conditions in one nation is felt in all. Events of vast and far-reaching influence upon the future are likely to occur at any moment, and there was never a time when the interest in international affairs was so deep or so widespread as now. The old Eastern question involving the fate of the Turkish Empire, the new Eastern question relating to the future of

China and Japan, the settlement of recent international complications relating to the American republics, the future of Cuba, and like topics, should be brought to the attention of the older pupils, in order that they may appreciate the significance of the foreign despatches of the daily press.

The sensational should be kept out of the schoolroom. That is not the place in which to tell the story of famous crimes or mysterious disappearances. All such subjects should be discountenanced or forbidden, except in those rare cases where they actually make history.

**Suggestive Outlines.** — Following are a few brief suggestive outlines for the presentation of recent foreign news notes :

1. The Cuban rebellion.

The relation of Cuba to Spain, and to other countries.

The Cuban rebellion of 1868, and the promises made by Spain as a result of that uprising.

The failure of the Spanish government to keep its promises, and the oppressive character of Spanish rule in the island.

Cuba's advantages as a commercial country.

The influence of bad government in retarding the development of the resources of Cuba.

The lack of facilities for transportation and for the expedition of commercial intercourse.

The irregular, guerilla-like character of the present insurrection.

The climatic and other influences favorable to the success of the Cubans.

The relations of the United States to insurgent provinces.

2. The close of the war between China and Japan.

What were the chief objective points of the Japanese campaign ?

Something of the history of Corea.

The comparative size and strength of the two nations, and their defenses.

The conditions of the peace.

The interference of Russia, England, and Germany in the settlement of this new Eastern question.

The terms of the treaty of peace.

3. "The Sick Man of Europe." (Refer to the *Dictionary of Fiction* in the supplement of the *International Dictionary*, for the origin of this term.)

The anomaly of Turkish rule in Europe.

The despotism of the Turks ; their bigotry ; polygamy and slavery.

The traditional policy of the Russian emperors, who, from Peter the Great, have held steadily in view the seizure of Constantinople for a new capital of the Russian Empire.

The immensely increased naval power which Russia would acquire from the consummation of this scheme.

The reasons why the Turks have been permitted to linger so long in Europe. The jealousy of Russia, exhibited by the Western Powers, and the fear that the apportionment of the evacuated territory would result in a gigantic war among the foremost nations of Europe ; the further fact that the overthrow of the Turkish government would jeopardize the payment of vast sums of money borrowed in various states of Europe by the Sultan at different times.

Recent events which seem to indicate that the Turkish Empire in Europe cannot long survive.

The time which can be properly devoted to summaries of current history is necessarily limited. Extended exercises of this nature should be conducted not oftener than once a week. In most cases a monthly review of current history will be found very satisfactory. Sometimes by inviting expressions of opinion from the more advanced pupils in reference to the events considered, the teacher can secure a somewhat general participation in the discussion.

**The Importance of Reading well.**—Whatever may be the nature of the general exercises at the opening of school, and whoever may participate in them, it is highly important that any and all reading shall be well and properly rendered. Poor reading will spoil the effect of the best selections. The basis of good reading is perfect naturalness in manner, accent, and delivery. Those who read should make a careful study of their selections until they have mastered them. They should fully understand the thought to be conveyed, and should present it with proper expression.

## CHAPTER II

### BEAUTIFYING THE SCHOOLROOM

**Modern Ideas of the Schoolroom.** — There is now a general subsidence of the surprise and opposition which were awakened among ultra-conservatives in education by the advance guard of those who seek to make the school a pleasant place to be in. It is conceded that the planting of flowers by the pathway of human knowledge will furnish a more inviting prospect, without diminishing the speed or detracting from the welfare of the traveler. The value of embellishment has been appreciated by at least one class of educational workers, — the makers of school text-books. The pupil of to-day can learn more of geography from the illustrations in a modern book on the subject than could have been acquired from the entire text which was in use twoscore of years ago. Much remains to be done in the overcoming of prejudices and the practical application of modern ideas to make the schoolroom cheerful and inspiring, but we are advancing.

All the surroundings of childhood should be bright and attractive. Yet how frequently is this fact overlooked, and how carelessly and needlessly is it disregarded. It is not a difficult matter to brighten up a dingy room, as the experience of the true teachers will readily attest. Upon the teacher's individual enterprise it must depend wholly in many cases.

**A Country-school Experience.** — The case of a young girl who assumed the charge of an isolated and neglected



school is an instance in point. She discovered her school-room to be a bare and dreary-looking place. The stove had not been polished since it was purchased from the hardware merchant, and was red with rust. It rested upon a platform of bricks that was gray with the infiltrated dust of many winters. The walls were bare, the plastering yellow and cracked. She procured stove polish, and enlisted the older pupils in the work of imparting a shining surface to stove and pipe. With venetian red and milk she prepared a rosy paint for the bricks of the platform. Such unwonted elegance became an inspiration and a contagion. Coöperative effort redeemed the window panes from cobwebs and dust. New and clean curtains soon appeared. Simple vases were procured and were filled with wild flowers by willing hands. Inexpensive pictures came to relieve the dismal monotony of the walls. Within a few weeks the room was so transformed as to be scarcely recognizable. Doubtless this has been the experience of many, with scarcely any variation, but with more of good results where financial means were available to add to the improvement. Even in the best-appointed schoolhouses, and in the most liberal and enlightened communities, much still depends upon the enterprise, taste, and tact of the teacher in the matter of increasing the suitability and attractiveness of the school-room.

**Inexpensive Improvements.** — Old school furniture may be renovated at little expense, and in general the decorations which will render the room attractive may be procured at a very small outlay, where more considerable expense is found to be impracticable. Where the teacher is left to depend wholly upon his own resources and the voluntary aid of the pupils, there is the more reason for making the most of every opportunity which may suggest itself, and the want of funds for the purpose of equipping and adorning the schoolroom does not remove, but rather increases, his responsibility in the premises.

**Care of the Room.** — Order and neatness are the first requisites of comfort and cheerfulness in the schoolroom. If the desks be littered with books and papers, if the piano or organ be piled with sheet music or song books, if the pupils' contributions to a school exhibit be allowed to litter the room, there will be little use in attempting to add to the number of such treasures, since each addition to them will but increase the confusion and discomfort. A proper care for articles of educational and artistic value is not always inculcated in the homes of pupils, and should be taught always in the school. (Globes should not be touched by the fingers, unless with the interposition of a clean handkerchief. Musical instruments should not be meddled with by the unskillful. Pictures should not be exposed to dust and dampness. Cabinets should not be rummaged by careless persons, nor should specimens of school work be roughly handled. Leaves should not be turned down in books.) Heavy volumes, such as dictionaries, should be treated with special care. Apparatus is often ruined by thoughtless manipulation. Glass and polished surfaces easily retain the imprint of finger marks.

(When once the pupils are taught the value of neatness, order, and a proper care of articles of value, they will be the more ready to contribute to these, and the more willing to participate in any plan for adding to the attractiveness of the school.)

**School Decorations.** — A visitor at the commencement exercises of a village high school near a great city was surprised to note what seemed to him the lavish expense of the decorations of the room. "Why," said he, "these ferns alone must have cost a large sum." "Not a cent," was the reply of a member of the graduating class; "we gathered them ourselves, and arranged them as you see them."

The decorations of the chamber were as tasteful and as rich as those of many a banquet hall in the famous clubs of the city. Festoons of pine, fringes of grasses strung by

knotted upon cords, banks of ferns, trophies of cat-tails and rushes, wreaths, and bouquets of flowers are beautiful adornments of schoolrooms upon notable occasions, and generally it might be well for them to be left longer upon the walls. In some schools the mottoes of successive classes remain upon the side walls from year to year, continuing their lessons of truth, and keeping green the memory of the classes gone. It is a graceful act for a graduating class to leave as a memento also a class photograph or a group of photographs suitably framed or placed in a durable album.

School flags are now common everywhere. When not in use without, they may serve as graceful and beautiful draperies; or, if they be used outside too frequently to admit of this, they may be represented within the schoolhouse by a few pasteboard shields of various shapes bearing the national colors.

(**Maps, Charts, etc.** — In most schools the bareness of the walls is relieved by maps, charts, pictures, etc. It is better, however, for most of the maps and charts to be kept in cases when not in use, as they are thus better protected.) As for physiological charts, they are not generally æsthetic, and their constant display does not add either to the beauty of the room or to the value of the work. The continuous display of a skeleton, or of any of its parts, is not to be commended in a schoolroom.

The globe, the dictionary, and the Bible upon the teacher's desk should be covered when the room is swept or dusted. Wastebaskets should not become overloaded. The principles of good housekeeping apply strongly to the keeping of the schoolhouse. In the bookcase the volumes should be tidily arranged. If many of these are old and unsightly, they will be made more presentable by new, adjustable covers, which can be easily procured and applied.

**Materials and Appliances of Educational Exhibits.** — In notable educational exhibits made at the great expositions

held in the United States within recent years, there have been displayed evidences of the pupils' work in many forms, the cabinets and devices for exhibiting them being of themselves highly creditable to the enterprise and ingenuity of the exhibitors. One of the best results of these exhibits has been the popularizing of whatever was excellent in plan or execution in connection with them, and the interchange of ideas by means of which this has been effected. The fact that an exhibit is in preparation is an incentive to teachers and pupils to put forth new activities and to exercise every faculty, to the end that a creditable representation of the work may be made. Many of the appliances employed in the school exhibits may be well utilized in the individual schools, as permanent features of the same. Some of these will be mentioned in detail. Others will readily occur to the thoughtful and ingenious teacher.

**School Cabinets.**—Collections of woods, leaves, flowers, fossils, minerals, insects, etc., have been exhibited by many schools; often by district schools not specially favored by their surroundings for work of this description. It is a mistake to suppose that such work is to be expected only of the larger and exceptionally well-equipped institutions of learning. A cabinet for holding collections of the nature indicated should constitute a part of the equipment of every school.

A very satisfactory form of cabinet, where space is limited, is a set of flat boxes, three to four inches deep, by twenty-four inches in the other dimensions, fitting like drawers in a case. For minerals, the drawer may be subdivided into small squares; for botanical and entomological specimens, subdivisions will not be necessary. It may take a long time to fill such a cabinet, but the knowledge that it is to be filled will stimulate the classes to activity in procuring specimens for it. Specimens may be obtained in many cases by exchange. For a mineral cabinet it will not be

difficult, generally, to procure specimens of graphite, native copper, native iron, galena, iron pyrites, gypsum, native salt, niter, quartz, talc, mica, cinnabar, green, blue, and white vitriols, varieties of coal, etc. By a careful search in almost any coal yard, one can often find pieces of coal which retain the configuration of leaves and stems in their original forms. By a little effort specimens of many other minerals, such as dolomite, apatite, tourmaline, serpentine, zinc blende, antimony, etc., may be procured. Specimens of metals, such as block tin or tin foil, lead, iron, steel, aluminum, platinum, etc., for comparison, will add to the interest of the collection. Specimens of rocks, such as clay, granite, marble, jasper, slate, marl, sandstone, limestone, etc., are easily procured. In localities where the drift is not deep, geological specimens of great interest may be gathered by the pupils; and even in less favored localities there are frequently found fossils admirably suited to such a cabinet collection. The use of the cabinet will teach the pupils to be on the alert, and to notice what they see in nature.

Each mineral or geological specimen should be numbered, the figures being marked upon minute pieces of cardboard or stiff paper, gummed to the specimen. The number and name of the mineral, rock, or fossil should be marked upon one of the edges of the compartment to which it belongs, so that if a specimen happens to be misplaced by accident, its true place will be readily found.

**Flowers in the Schoolroom.**—Flowers add greatly to the attractiveness of the schoolroom. Cut flowers in vases are valuable for ornamental purposes, as well as for the illustration of botanical lessons, and of more general talks on plant life. The arrangement of flowers in a vase, with a view to the harmony of their colors, involves the exercise of taste and skill. Growing plants in pots or boxes will be found useful for study, as well as pleasing from an æsthetic point of view. A bracket-shelf extension of a window ledge will serve to accommodate these, where they

may receive the needed air and sunshine, though a movable plant stand is preferable. If possible, the flowers should have the benefit of the morning light. Of growing plants, those should be selected which present variety in the manner of their growth, in order that diverse forms of plant life may be compared. Some seeds should be planted to illustrate the process of sprouting. Some plants should be grown from cuttings, some from bulbs. A fan palm or other exotic is an object of much interest in a schoolroom, but it requires more care and attention than need be given to the hardier plants which are native to northern climates. A bed of ferns may be grown in a deep box, or in some shady spot in the school yard, if the soil and climate be favorable.

**Botanical Collections.** — Portfolio plant collections should form a part of the equipment of every school in which botany is taught systematically. The sheets for the portfolio should be of the standard size adopted for the American herbarium ( $11\frac{1}{2} \times 16\frac{1}{2}$  inches), and the pressing and drying of the flowers should be carefully performed. Directions for the pressing, mounting, and labeling of the specimens can be found in any text-book of botany. The collection should include all the native plants in the vicinity of the school.

A more durable botanical exhibit may be made in the form of a turning cabinet, as follows: Wooden tablets  $16 \times 14$  inches, surrounded by a double molding to protect the edge of each face, are hinged upon a turned post, which is fastened firmly in the floor. Large cards and protecting glass are inserted in the molding, as in a picture frame. Three small eyelets are screwed into one side of the frame. Three horizontal, flat iron rings, surrounding the post at suitable intervals, with a circle of holes punched through, near the outer edge, will serve for the attachment of the frames, by one edge, to the post. By holding the frame in such a manner that each of the eyelets (turned horizon-

tally) may rest upon the ring immediately above the perforation, a long, stiff wire, hooked at the upper end (to prevent its falling through) may be slipped into the openings, thus forming a hinge. The frames may be turned to allow a free inspection of the cards to which botanical specimens are attached, and the latter will be permanently preserved from dust and wear.

Such a cabinet may be presented to a school with the nucleus of a collection, by one class, leaving to others the task of filling out the collection. The cabinet, if well made, is a handsome and valuable addition to the furnishing of the schoolroom, and offers a never-failing source of interest to the pupils. A similar arrangement of swinging frames may be used for a variety of purposes, such as for the display of drawings, photographs, etc.

**Entomological Collections.** — Such collections by pupils of all grades are valuable acquisitions to any school. In time, all our high schools will be supplied with these, as aids to the study of zoology. But it is an error to suppose that high schools are solely or chiefly interested in securing them. Something of the nature and habits of insects, their peculiar and remarkable organs, and the purposes which they serve in the economy of nature, will constitute profitable lessons for young pupils who know nothing of the scientific terms used in the classification and description of these forms of life. "From the abundance of material," says Dr. Edward S. Morse, "and the comparative ease with which the specimens may be preserved for cabinet use, shells and insects have always formed the favorite collections of children. They are the most common objects in nearly all collections, and it has seemed to the author that here the pupil ought to commence his studies." Butterflies and moths of themselves will constitute a beautiful collection, and the smallest pupils will easily learn to distinguish these. Butterflies, it will be remembered, fly in the daytime, while moths fly only at night, or in the twilight. Butterflies, when at rest, gener-

ally fold their wings, holding them perpendicularly above their backs, while the wings of moths are always spread out. The antennæ, or thread-like projections from the head of the butterflies, grow larger at the ends, forming little knobs. The antennæ of the moths grow smaller at the ends, and often have the appearance of little tapering feathers. Common beetles (pinching bugs), Colorado beetles (potato bugs), dragon flies, bees, wasps, and other common insects are valuable for entomological collections. Insects for preservation are generally mounted upon long pins, stuck in the bottoms of very shallow boxes, or cases. It is well to have these cases covered with glass, to exclude the dust.

**Aquariums.** — An aquarium is a source of interest and profit in the schoolroom. It affords an opportunity for the study of various forms of animal and plant life, and is desirable in itself. Glass globes for goldfish distort the view of the fishes, and are less desirable than the oblong tanks with glass sides. Small aquariums of iron and glass are not expensive, and will repay their cost in the pleasure which they afford, and the opportunity which they offer for the illustration of various subjects. When these are supplied to schools in the country, pupils will vie with each other in providing fishes, turtles, pollywogs, pebbles, etc., for them. Care should be taken that the aquarium shall not prove leaky, and it should be firmly stationed upon a stand or bench, where it will not be liable to overturning.

**Pictures.** — Pictures are of all kinds and prices, but one rule in their selection should be always observed: Select something that is *good*. Good things are not necessarily expensive, but are often thought to be. Portraits or photographs of American authors ought to be found in every schoolhouse. Generally they can be procured at a cost of less than five dollars apiece, frames included. There is an inspiration in the photograph of a man or woman whom we all love and revere. Its influence is



always present to encourage or to admonish ; to fill us with high aims and noble purposes. A graduating class could leave as a memento no better gift to the school than a picture of Longfellow, Emerson, Whittier, Lowell, or Holmes. Photographs and etchings are useful, not only as a means of giving pleasure, but as a source of knowledge. In these days of cheap pictures the school should be supplied with photographs of buildings and public works, noted scenes at home and abroad, masterpieces of art, etc. The most striking feature of a certain poor and mean settlement in the neighborhood of one of our great cities is the number of pictures with which its schoolhouse is adorned. They are of all kinds and sizes. They reveal the famous works of old masters, the most noted buildings of the world, famous scenes in many countries, striking landscapes, and representative men. What a revelation is this to all who enter the unassuming building for the first time! What an educating, elevating influence is their silent teaching!

Something of this culture may be brought to every schoolroom. We cannot all have a duplicate cast of the Parthenon frieze, but we can all have a picture of the Parthenon itself, or of the Coliseum, or of Westminster Abbey. I would have the calm features of Washington and the honest, patient, manly face of Lincoln looking down upon every schoolboy and schoolgirl in the land, to teach what individual worth can accomplish, what faith and patience may endure.

**Picture Cases.** — The pictures of a schoolroom need not all be framed. Many engravings illustrative of history, geography, literature, and science may be preserved in another way, and exhibited only on occasions when specially needed. A picture case may be made in the form of a square, shallow, wooden box, fastened by one side to the wall, and with the upper half of the outer side hinged, so as to drop down, thus offering access to the card pictures within. Within recent years the process of photogravure,

and the increased demand of views illustrative of geography and travel, have led to the publication of various moderate-priced books of large pages, for the display to classes of pictures of landscapes, noted buildings, etc.

When such books are used, they should be handled carefully, and a bookstand should be provided for displaying them. If the teacher should not find such a book available, for lack of funds, a large scrapbook, neatly kept, with pictures from newspapers, advertisements, calendars, etc., will prove valuable as a substitute. To such a scrapbook all pupils would willingly contribute.

**Coöperation in Beautifying the Schoolroom.** — Thus far, the suggestions made have generally concerned only such furnishings and adornments as may be procured easily by the coöperation of teachers and pupils, and with but little cost of money or of effort. Apart from the fact that teachers frequently find it difficult to secure appropriations for such purposes from the public funds, there is an advantage to be gained by enlisting the coöperation and inviting some sacrifice of pupils in securing the articles desired. Pupils are more appreciative of the things which their own efforts procure. They are less careless and destructive in their treatment of articles which their own hands have made. There is also the valuable lesson of coöperation and systematic work to a given end—a lesson which cannot be impressed too strongly upon the youthful mind.)

**General School Furnishings.** — A general discussion of school furnishing and equipment would be beyond the limits of this chapter. The seats, desks, bookcase, maps and charts, globes, physical and chemical apparatus, piano or organ, library, dictionary and reference books, etc., are supposed to be purchased by the school authorities, and the amounts of money applied to the purpose will vary according to circumstances. The teacher should be conversant in the matters of cost and comparative excellence in these lines of merchandise.

**A Valuable Auxiliary.** — A valuable auxiliary in the way of school equipment is the stereopticon, which is finding its way into many well-appointed schools at the present time. For ordinary use those that are fitted with oil lamps will be found satisfactory. The collection of slides can be increased from time to time, and made to illustrate most of the studies of the curriculum. After the instrument is purchased, the cost of operating it and of procuring new slides will be merely nominal. The stereopticon is most useful in teaching history, geography, and natural science.

**The Æsthetic in Education.** — By keeping in mind the needs of the schoolroom, the teacher will find many opportunities to add to its treasures. The additions may be small in themselves, but if each succeeding year adds something to the store, they will count for much in the end. In this practical age there is danger of paying too little attention to the æsthetic element of school life. If we educate pupils solely with a view to their production of wealth, we may stunt their appreciation of what is good and beautiful in nature and in art. School life should result in refinement of body and soul, without which education is but an incomplete and unsatisfactory acquirement.

## CHAPTER III

### SINGING GAMES FOR LITTLE PUPILS

**Old Games for Little Children.**—Madame Charrière, the French novelist, informs us that the old nobility of France, when driven from home by the Revolution, found employment throughout Europe as teachers of children. Thus were scattered in many lands a multitude of infantile diversions with which the children of princely houses had been amused in the exclusive society of the old régime. Gogol, the father of Russian novelists, expresses in his *Dead Souls* a true Russian contempt for these “genteel recreations,” which in his time formed a part of the child life in all the great families of his nation, as a legacy of the French emigration.

**Influences of the Kindergarten.**—In Germany the seeds of child culture fell on fertile soil. It was reserved for Froebel to develop the kindergarten system, which considers scientifically the complete training of the child from infancy in its simplest diversions, and in all the development of intellectual and physical activities.

The providing of suitable games for little children is a matter of much care to kindergarten teachers. The plays of childhood exert a strong influence upon the formation of character and habit. They should be such as to involve the exercise of courtesies of speech and of action, and they should provide exercise and training in grace of movement.

Children should be encouraged to play at suitable times and places, and not to seek seclusion. A child should not

be left to pout or "mope." A predisposition to sullenness can be best overcome by leading the child into an active participation in the healthy pastimes of other children.

**Suitable Games for Little Children.**—Many of the popular games of children are objectionable for various reasons. Some involve the risk of physical injury; others, solecisms of speech; still others, the objectionable feature of promiscuous kissing, etc. The more desirable games for children should be encouraged, to the exclusion of the less appropriate.

In the arrangements of modern public schools, the boys and girls have, generally, separate playgrounds, so that the games are to be played by girls only or by boys exclusively. A boy's part, however, can be taken as well by a girl; and games which were formerly played by boys and girls together can be utilized frequently in either division of the modern playground.

**The Improvement of Manners.**—The manners of the people have undergone a vast change within a few generations. Conduct which would now be deemed insupportable in the home or in social gatherings was deemed unobjectionable in former times. In nations, as in families, there is a gradual growth in refinement, which may be greatly augmented by the system of education pursued.

Various popular adages illustrate the influence of the surroundings of childhood upon the formation of character. "The hand that rocks the cradle is the hand that rules the world." "Let me write a nation's songs, and I care not who writes its laws." "As the twig is bent, the tree is inclined."

"Where would you begin the education of a polished gentleman?" was asked of a noted American.

"With his grandfather, sir," was the prompt reply.

While the teacher of to-day cannot begin with the grandfathers of the pupils in school, he can begin with the grandfathers of generations yet to be.

The teacher should take care that the training of the

young pupil in politeness shall begin with his first day in school, and that little acts and expressions of courtesy by other pupils be extended to every newcomer.

**Welcoming a New Pupil.** — A little action song of greeting to a new pupil offers a graceful welcome, which will be appreciated by the little child who enters the school for the first time. The song will serve to make the children acquainted at once, and will remove the shyness and the feeling of loneliness which are sometimes oppressive to the newcomer in his first school experience. It will leave upon his mind a lasting impression of courtesy and kindness, and will prompt him to join heartily in a similar welcome to others who come after him.

We will suppose that little Charlie enters the school as a new pupil. At recess the teacher instructs his classmate, Willie, to present him to the other little pupils on the playground. The classmates form a circle around the two boys, and march around them, singing the first of the stanzas which follow here:

Charlie's very welcome here,  
He must feel at home,  
He will find us full of cheer;  
We are glad he's come.  
Charlie, Charlie,  
We are glad he's come.

The pupils now cease marching, and face the center, while singing the second stanza:

In our circle he shall stand,  
While his classmates bow.  
Willie takes him by the hand,  
And presents him now.  
Charlie, Charlie,  
He's a classmate now.

At the third line Willie takes Charlie by the hand, and as Charlie's name is called (twice), the two boys bow slowly

and gracefully, first to the half circle in front of them, and then, turning, to the other half circle. The pupils in the circle at the same time make a graceful bow to the two boys in the center. The song may be repeated several times, if successive pupils desire the honor of presenting their new friend to their classmates. The music of this song, and others which follow, will be found at the close of this chapter.

**Morning Greetings.** — A pleasant form of morning greeting is as follows: The little pupils who come early to school form a group or circle about one of their number (Grace), and sing the three stanzas which are given below:

There is a merry little girl  
Who always loves to play,  
Who always loves to play.

From those around now choose a friend  
Your compliments to pay,  
Your compliments to pay.

Now bow to each and bow to all,  
And wish a happy day,  
And wish a happy day.

As the second stanza is sung Grace extends her right hand to one of the other pupils (Fannie), who steps with her into the center of the group. At the third stanza Grace and Fannie bow, first to each other, then to the pupils of one side of the circle, then, turning, to those of the other side. There is thus one bow for each line of the third stanza. Grace now takes a place in the circle, leaving Fannie in the center to choose a friend as the song is repeated. Thus the greetings may be prolonged indefinitely.

**The Missing Pupil.** — The little diversion of the missing pupil is old, and is variously modified. A small pupil (Anna), in the center of a group or circle, is blindfolded, while her playmates march around and sing this stanza:

Happy now together  
All our classmates play.  
We are ne'er so merry  
When there's one away.  
But someone is missing —  
O, alas, it's true !  
Please will some one call her ?  
Anna, dear, will you ?

As they sing, one of their number detaches herself from the others, and hides behind a tree or behind the teacher. The child in the center removes the bandage from her eyes, and guesses who is gone. If she guesses correctly, the child who is concealed is the next to take the place in the center.

**The Little Shepherdess.** — The old French nursery game of the little shepherdess (*Ramène tes moutons bergère*) is played as follows: The children form a circle, taking hold of hands, while one of their number (Carrie) sings and repeats the line,

Here's the girl I love the best ;

and then (letting go the hands of those next to her, and stepping within the circle, so as to face the child on her right) sings and repeats the line,

I'll present her to the rest.

Carrie now joins hands with her *vis-a-vis* (Lulu), the two girls raising their arms so as to permit the others to pass under; and all the circle moves round through the "wicket" thus formed, the two girls singing the succeeding stanza:

Now the wicket we'll unlock.  
Shepherdess, lead in your flock !  
Now the gate we open hold,  
Till the flock is in the fold.

After its conclusion, Carrie resumes her place in the circle, and Lulu sings the first lines alone, turning to the pupil on her right to form the "wicket," etc.



**London Bridge.** — Similar to the foregoing is the familiar game which is played to the monotonous refrain :

London bridge is falling down —  
 Falling down, falling down —  
 London bridge is falling down,  
 My fair lady !

In this diversion a line of pupils passes through a “wicket,” or “bridge.” As the last word is pronounced, the two children who form the “bridge” drop their arms (still joined) in such a way as to catch the one who is passing through. The child thus caught then takes the place of one of the pupils forming the “bridge,” and helps to catch some other child in the same way, when the “bridge” falls.

**Planting Cabbages.** — An old game of the peasant children of Europe is entitled “Planting Cabbages” (*savez vous planter des choux*). A group of children walk about, sometimes irregularly and sometimes in a circle, singing the first stanza (which is also the chorus) of a simple ditty, as follows :

If your cabbage you would plant,  
 Plant it well, plant it well.  
 If you don't know how it's done,  
 Listen now and hear us tell.

In the second stanza the walk is arrested, and the pupils make a motion of planting with the toes of their shoes, as they sing the second and fourth lines. Care is taken that the rapid motions of the planting shall be made in unison. The stanza runs thus :

It is planted with the toe —  
 That's the way, that's the way ;  
 It is planted with the toe —  
 We are gardeners to-day.

*Chorus.*

The motions of the planting in the succeeding stanzas are varied, and suited to the words of the ditty. There may

be an indefinite number of stanzas. Among those most usually sung are the following:

It is planted with the heel —  
That's the way, that's the way ;  
It is planted with the heel —  
We are gardeners to-day.

*Chorus.*

It is planted with the thumb —  
That's the way, that's the way ;  
It is planted with the thumb —  
We are gardeners to-day.

*Chorus.*

It is planted with the wrist —  
That's the way, that's the way ;  
It is planted with the wrist —  
We are gardeners to-day.

*Chorus.*

It is planted with the knee —  
That's the way, that's the way ;  
It is planted with the knee —  
We are gardeners to-day.

*Chorus.*

**Marguerite.** — The little game of Marguerite is very common in Europe. A group of children surround a little girl (Marguerite), each one taking hold of the skirt of her dress. A boy who is called the "little knight" advances from without, singing the first stanza.

O where is Marguerite  
To-day, to-day, to-day ?  
O where is Marguerite,  
For I've a call to pay.

The girls surrounding Marguerite reply in the second stanza

She is within the castle,  
To-day, to-day, to-day.  
She is within the castle,  
O little knight so gay.

The little knight as he walks around the group then sings :

O won't you let me see her,  
 To-day, to-day, to-day ?  
 O won't you let me see her ?  
 For I've a call to pay.

The girls around Marguerite respond as follows :

The walls are closed around her  
 To-day, to-day, to-day.  
 The walls are closed around her,  
 O little knight so gay.

The little knight selects one of the pupils representing the wall, and leads him to a little distance where a line is to be formed, singing meantime :

I'll take away a stone, then,  
 To-day, to-day, to-day.  
 I'll take away a stone, then,  
 For I've a call to pay.

The remaining children who constitute the "wall" sing :

But one is not enough, sir,  
 To-day, to-day, to-day.  
 But one is not enough, sir,  
 O little knight so gay.

Again the little knight advances, walks about the group and selects another "stone" from the "wall" as he sings :

Then I will take another,  
 To-day, to-day, to-day.  
 Then I will take another,  
 For I've a call to pay.

The last two stanzas are repeated, with the same action, until but one of the children is left holding Marguerite's dress. The little knight now advances toward the two children without singing, and pointing to Marguerite's dress, exclaims,

What is there in that ?

The child who still retains the hold upon Marguerite's dress, replies :

It is a little package of clothes to wash.

The little knight then exclaims :

I will go and get my knife and cut the string.

He then springs quickly back to the line which he has formed, the last attendant of Marguerite with him. As soon as the line is reached all the children pursue Marguerite, and the girl who catches her is entitled to be "Marguerite" in the next game.

**The Peasants.** — A little game descriptive of simple peasant life in the Old World is very popular in many lands, and is played in a variety of ways, one of which is as follows :

A group of children, boys and girls alternately, join hands in a circle and sing this stanza :

Would you know how does the peasant —  
Would you know how does the peasant —  
Would you know how does the peasant  
Sow his barley and wheat ?

While the second stanza is sung the pupils drop their hands and march around to the left, imitating by their gestures the sowing of grain. The left arm seems to hold, close to the waist, a bag of seeds, into which the right hand is dipped repeatedly in time to the music, and the right arm is then extended forcibly from the side as though the singer were scattering grain upon the ground.

Look ! 'tis so — so — does the peasant —  
Look ! 'tis so — so — does the peasant —  
Look ! 'tis so — so — does the peasant  
Sow his barley and wheat.

While the next stanza is sung, the children again clasp hands and face toward the center of the circle.

Would you know how does the peasant —  
 Would you know how does the peasant —  
 Would you know how does the peasant  
 Reap his barley and wheat ?

In singing the next stanza the children again march around to the left, making gestures illustrative of mowing with a scythe, the gestures being in unison with the cadence of the music. The arms are extended forward, slightly bent at the elbow, and apparently grasping the upright pins of a scythe handle. The motion to the left is vigorous, while the return motion of the hands to the right is quicker and without apparent effort. In indicating the stroke of the scythe, the mower should lean forward as though performing severe labor.

Look ! 'tis so — so — does the peasant —  
 Look ! 'tis so — so — does the peasant —  
 Look ! 'tis so — so — does the peasant  
 Reap his barley and wheat.

While the next stanza is sung, the children resume the same position as in the first and third.

Would you know how does the peasant —  
 Would you know how does the peasant —  
 Would you know how does the peasant  
 When his day's work is done ?

In singing the next stanza, the pupils kneel upon the left knee, placing the elbow upon the right knee, and the forehead upon the hand, as if resting from labor.

Look ! 'tis so — so — does the peasant —  
 Look ! 'tis so — so — does the peasant —  
 Look ! 'tis so — so — does the peasant  
 When his day's work is done.

The next stanza is sung in the same manner as the first, third, and fifth.

Would you know how does the peasant—  
Would you know how does the peasant—  
Would you know how does the peasant  
When his harvest is home?

At the last word of the foregoing stanza, each boy turns and clasps hands with the girl on his right, and all merrily dance around the circle, while the following stanza is sung:

Look! 'tis so — so — does the peasant —  
Look! 'tis so — so — does the peasant —  
Look! 'tis so — so — does the peasant  
When his harvest is home.

**The Bridge of Avignon.** — A game illustrative of the various trades and occupations, and suitable for either boys or girls or for both together, is known as the bridge of Avignon (pronounced *av-een-yó*). The children march around to the left in a circle, singing:

On the bridge of Avignon,  
See them go — see them go!  
On the bridge of Avignon —  
See them marching in a row!

In singing the first two lines of the second stanza the children stop, a little distance apart, and face to the center, imitating successively the motions involved in three forms of carpenter work; as, driving a nail, sawing, and planing a board. The motions are repeated with the last two lines.

The carpenters do this way,  
And this way, and this way.  
The carpenters do this way,  
And this way, and this way.

The first stanza is repeated as a chorus while the pupils march as before, and a second occupation is illustrated in another stanza. This time it is the blacksmith, who works the bellows, pounds the iron, and nails on the shoe of a

horse. Later on, it is the baker, who kneads his bread, cuts it into loaves, and places it in the oven. Little girls can fashion the song to illustrate the work of the dressmaker, the laundress, etc.

At the close, in a single stanza, the courtesies of recognition may be shown by both boys and girls, but differently—the girls and boys making graceful bows, and the boys lifting their hats, while all sing:

The ladies all do this way,  
And this way, and this way;  
The gentlemen do this way,  
And this way, and this way.

The game concludes with the chorus. Sometimes the pupils dance around the circle at the last chorus.

**Knights and Ladies.**—A very pretty game, suggestive of the ancient days of chivalry, and based upon an old English ditty, may be played by pupils of any age. The boys and girls arrange themselves in a circle around a chosen knight, facing the center, and stepping sidewise to the right as they sing:

King Will was not King James's son,  
And yet the royal race did run;  
And when he wore Britannia's crown,  
A partner shared his high renown.

Go, choose from east or choose from west, —  
Advance, Sir Childe,<sup>1</sup> and make your quest;  
For every gallant knight 'tis meet  
To choose a lady fair and sweet.

At the end of the second stanza, the knight chooses a partner from the girls in the circle, offering her his hand, and conducting her to the center. The boys and girls stand still as they sing the third stanza:

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<sup>1</sup> An ancient form of address for young knights.

In olden time the brave knights kneeled,  
And vowed upon their lance and shield.  
Obeisance make upon the ground,  
And hasten, for the trumpets sound.

At the third line the knight drops gracefully upon his left knee, takes his partner (who stands at his right) by the hand, and raises his left arm as though making a promise. At the last line he rises, bows low to his partner, and takes his place in the circle. The boys and girls in the circle now step again to the right as they sing:

O maiden, lift your sorrowing face  
And choose a knight to take his place ;  
Go choose from east or choose from west,  
Go choose a knight from all the rest.

While the last line is sung, the girl in the center chooses a partner from among the boys in the circle, and he, offering his right arm, conducts her back to the center, standing at her left. The third stanza, slightly altered, is here repeated, with the action before indicated.

In olden time the brave knights kneeled,  
And vowed upon their lance and shield.  
Obeisance make upon the ground,  
And tarry till the trumpets sound.

With the first two lines of the stanza which follows, the first knight steps to the center of the circle and, offering his right arm, conducts the girl away. The second knight, having gracefully relinquished her, remains alone.

The knight returns to claim his prize ;  
The maid departs with glad surprise.  
A knight remains to choose his own,  
And write his vows upon the stone.

The march continues while this stanza is sung. At its close, the song is repeated from the beginning. Alternately



a boy in the center chooses a girl from the circle, and a girl in the center chooses a boy from the circle.

**Marches.** — Children's marches about the school grounds should constitute an important part of their physical recreation. Dr. Hailmann calls attention to the value of marches in the following statement:

On account of their naturally rhythmical movements, their flexibility, and their readiness to admit other elements, the marches offer an inexhaustible source of pleasure, instruction, and exercise. The children may march in single, double, treble, or more-fold file. The files may move in relatively the same direction throughout the game, or they may diverge at certain points, and converge again at others. Again, the children may march in straight, zigzag, variously curved, wavy, or spiral lines, describing more or less symmetrical figures as they proceed; they may move evenly at a regular pace, or they may step with more force with one or the other foot, or change step at certain intervals; they may march on the soles or on the toes of their feet with various degrees of rapidity; they may have hold of one another's hands, or they may march independently; in either case, they may go through a variety of movements with their arms, corresponding with the movements of the feet. Again, they may be arranged in two rows, facing each other, and go through a variety of related evolutions; or they may be arranged in three or four rows, forming the lines of triangles or quadrilaterals, and produce the most delightful and instructive transformations. A few simple marching songs will suffice for these games. The directions should be short, simple, and to the point; the older and more experienced children should be distributed so as to serve as guides and examples to the younger ones; the signals for changes in movements should be given by the hands or by short words of command, which, in some cases, may be repeated by a few of the older players, disposed as guides.

**A Marching Song.** — An old marching song of lively measure is presented here. The pupils should "stop," "turn," "stamp," and "clasp" quickly and in unison when the italicized words are sung, the pauses in the march being only momentary.

Children, go  
To and fro,  
In a merry, pretty row;

Footsteps light,  
Faces bright,  
'Tis a happy sight.  
*Stop* a moment, *turn* around,  
*Stamp* your right foot on the ground.  
Glad are we,  
Full of glee,  
Singing merrily.

Birds are free,  
So are we,  
And we live as happily ;  
Work we do,  
Study too,  
Much we learn to do.  
Then we laugh and dance and sing,  
Gay as birds or any thing !  
Glad are we,  
Full of glee,  
Singing merrily.

Work is done,  
Play's begun ;  
Now we have our laugh and fun.  
Happy days,  
Pretty plays,  
Banish naughty ways.  
*Stop* and *clasp* each other's hand,  
We're a little happy band.  
Glad are we,  
Full of glee,  
Singing merrily.

Pretty marches are often arranged for the schoolroom, and serve an excellent purpose on stormy days. They may be accompanied by either vocal or instrumental music. Short marches from leading operas can be utilized for the purpose, where the room is supplied with a musical instrument. In this way the pupils of many schools have become familiar with the soldiers' march in *Fuust*, and with beauti-

ful marches from *Norma*, *Aïda*, etc. Any simple march music, however, will answer the purpose.

**Exercise Songs.** — Descriptive songs suggestive of various physical exercises are a source of delight to children. They help to “wake up” the school when pupils become drowsy or weary, and they add life and animation to the work. The following song is to be sung by pupils seated at their desks:

Patter, patter, let it pour ;  
 Patter, patter, let it roar,  
 Down the steep roof let it rush,  
 Down the hillside let it gush.  
 'Tis the welcome April shower,  
 Which will wake the sweet May flower.

Patter, patter, let it pour ;  
 Patter, patter, let it roar,  
 Let the gaudy lightnings flash,  
 Let the headlong thunder crash,  
 'Tis the welcome April shower,  
 Which will wake the sweet May flower.

Patter, patter, let it pour,  
 Patter, patter, let it roar,  
 Soon the clouds will burst away,  
 Soon will shine the bright spring day,  
 Soon the welcome April shower,  
 Will awake the sweet May flower.

While the first two lines of each stanza are sung, the pupils are to imitate rain by tapping their desks with the ends of their fingers. Occasionally they may turn the palms of the hands upward, striking the desks with the finger nails, thus indicating the sound of hail. At the words “rush,” “gush,” “flash,” and “crash,” the palms of the hands are brought down together with a clap. While the next line to the last in each stanza is sung, the pupils resume their imitation of the sound of the rain, and, as the last line of each stanza is sung, they extend their hands, palms upward, and wave them up and down.

**A Song of the Antediluvians.**—A quaint little exercise song of the “Antediluvians” is based upon the account given in the Bible (Genesis iv. 20–22) of the children of Lamech. Of these, Naamah is the legendary inventor of spinning and weaving, and the occupations of the other members of this antediluvian family are all given.

In the chorus, certain boys represent Jubal, imitating the motions of playing upon a harp; others represent Jabal, imitating the shearing of sheep; still others represent Tubal-Cain, imitating the operating of a blacksmith’s bellows and the pounding of iron with heavy hammers. The girls all represent Naamah, imitating various motions involved in simple processes of spinning and weaving. All are busy. In the last two stanzas the work is laid aside and the pupils begin to nod, all eventually dropping off to sleep at the last, with the heads resting upon the arms. The successive nodding and recovery of position should be natural, the motions becoming successively slower and feebler, and the voices at the same time dying gradually away. The song is as follows:

We are all Antediluvians,  
An-te-diluvians.  
We are all Antediluvians,  
As busy as we can be.

Jabal, Jubal, Naamah, Tubal-Cain,  
Gay as the singing birds and free!  
Jabal, Jubal, Naamah, Tubal-Cain,  
Gay Antediluvians are we.

Blacksmith and shepherd and music man,  
Spinner and weaver and household queen,  
Doing as much and as well as we can,  
At work we’re always seen.

Jabal, Jubal, Naamah, Tubal-Cain,  
Gay as the singing birds and free!  
Jabal, Jubal, Naamah, Tubal-Cain,  
Gay Antediluvians are we.

We are all Antediluvians,  
 An-te-diluvians !  
 We can't deny it,  
 We live in the land of Nod.

To the east — of — Eden —  
 We — are — all — Antediluvians —  
 We can't — deny — it —  
 We — live — in the l-a-n-d of N-o-d.

**A Familiar Exercise Song.** — The following old and familiar song (slightly modified) is adapted to exercise singing in the schoolroom. The music of this is the same as that of the march song presented above.

Here we stand,  
 Hand to hand,  
 Ready for our exercise.  
 O how fine,  
 In a line,  
 Heads erect and steady eyes.

*Chorus.*

Singing cheerily,  
 Cheerily, cheerily ;  
 Clapping merrily,  
 Merrily, merrily ;  
 One, two, three,<sup>1</sup> don't you see  
 Where pupils love to be.

Right hand raise,  
 Left hand raise ;  
 Slowly drop and fold them now,  
 Let them fall  
 As we all  
 Gently to each other bow.

*Chorus.*

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<sup>1</sup> With the words "One, two, three," the pupils take three steps forward, starting with the left foot. With the words "don't you see," they take three steps backward, to the original position.

Eastward point,  
Westward point ;  
Left hand nadir, zenith right ;  
Forward fold,  
Backward fold,  
Arms akimbo, chest upright.

*Chorus.*

Now take seat,  
Square your feet,  
With the very least of noise. ♪  
Clasp the hands  
On the stands,  
Now, attention, girls and boys !

*Chorus.*

Quickly stand,  
Lungs expand,  
Backward let the shoulders go.  
That's the way,  
Teachers say,  
For us all to stand and grow.

*Chorus.*

Left foot fore,  
One step more,  
Two steps backward, then retreat.  
Gently now,  
Each must bow,  
And step softly to his seat.

*Chorus.*

**Toasting Song.** — There are various forms of an old French toasting song (*Vive la compagnie*) which may be used for a graceful exercise of the school or class. Since toasts are now largely dissociated from drinking wine, the song contains no necessary suggestion of drinking anything other than water, and is wholly unobjectionable. It is not necessary, even, that the fingers assume the position of holding a goblet when the accompanying gestures of the arm are

made. The gestures are graceful in themselves, and give a very pleasant effect to the song.

When all are seated, one pupil rises and sings the following stanza, offering a toast. With the second line he raises his right arm in front as though holding a glass. The action is repeated in the fourth line.

Come, schoolmates, and join in my song with a will —  
     Here's to the friends we love !  
 May Heaven preserve them and keep them from ill —  
     Here's to the friends we love !

In the chorus which follows all join, rising to their feet at the first word.

O friendship's the toast that is offered to-day —  
     Friendship to last while the years roll away.  
 Health to our friends ! joy to our friends ! —  
     Here's to the friends we love !

As the last two lines are sung, and the imaginary cup is represented by every one present, there should not be disconnected and jerky motions of the right arm, but rather a progressive motion describing three successive curves. The arm is at first raised gently forward, as though offering a goblet, then higher and backward to one side, then still higher and farther back above the singer's head. The chorus should be sung with spirit.

The second pupil sings the first line of the second stanza, and the entire class, remaining seated, sings the second line. A third pupil sings the third line, and the entire class (still seated) sings the fourth.

And first to the parents who've watched o'er our youth —  
     They are the friends we love.  
 And next to the teachers who lead us to truth —  
     They are the friends we love.

*Chorus.*

The first and third lines of the third stanza are sung by a fourth pupil; the second and fourth by the entire class as before.

A toast to the absent, to all of us dear —  
The absent of those we love.  
O would they were with us to join in our cheer!—  
Here's to the friends we love!

*Chorus.*

The first and third lines of the last stanza are sung by a fifth pupil; the second and fourth being sung by the class as usual.

And here's to the brave and the loyal and free—  
They are the friends we love.  
Their lives are incentives for you and for me,  
They are the friends we love.

*Chorus.*



## WELCOME SONG FOR LITTLE PUPILS.

"Charlie's very welcome here."



## MORNING GREETING. "There is a merry little girl."



## THE MISSING PUPIL. "Happy, now, together."



## THE LITTLE SHEPHERDESS. "Here's the girl I love the best."



LONDON BRIDGE. "London bridge is falling down."



PLANTING CABBAGES. "If your cabbage you would plant."



MARGUERITE. "O where is Marguerite?"



THE PEASANTS. "Would you know how does the peasant."

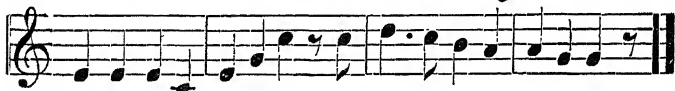
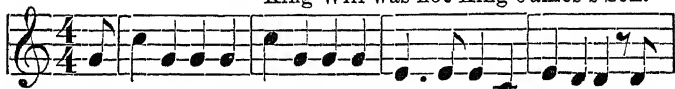


## THE BRIDGE OF AVIGNON. "On the bridge of Avignon."

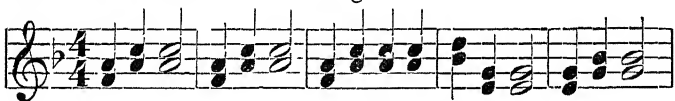
*Fine.**D.C.*

## KNIGHTS AND LADIES.

"King Will was not King James's Son."



## MARCHING SONG. "Children go to and fro."



APRIL RAIN. "Patter, patter, let it pour."



THE ANTEDILUVIANS. "We are all Antediluvians."  
1st, 3rd and 4th stanzas



CHORUS.



2d stanza.



TOASTING SONG. "Come, schoolmates, and join in my song."



## CHAPTER IV

### GEOGRAPHICAL RECREATIONS

**Singing Geography.**—Most middle-aged Americans of the present day will recall with interest and with some amusement the “singing geography” of the days of the '50's. The capitals of the States and Territories of the Union, with their location in reference to water courses, were repeated in short lines set to music, and were sung throughout the land. Each line was repeated once, thus forming a distich, and affording a little variety to the music. Some of the names were apt to be distorted, in order to fill out the measure of the lines.

Maine, Au-gusta, on the Kennebeck River,  
Maine, Au-gusta, on the Kennebeck River.

New Hampshire, Concord, on the Merrimac River,  
New Hampshire, Concord, on the Merrimac River.

sang the pupils in thousands of schools. And so on, throughout the entire list. The effect was electrical. The dullest pupil was stirred by the melody of the young voices and the novelty of the exercise. Usually some pupil pointed out the capital cities upon a map, as the names were sung. Children “sang the capitals” at home, and demanded maps for the household. Little ones who had not learned to speak distinctly caught the contagion and learned to “point off,” as well as to sing, with their older brothers and sisters. The royal road to learning seemed to be discovered. Never was there such a marvel of easy and rapid acquirement of

knowledge. What had begun probably as a mere recreation in the study of geography became the settled business of the class. Soon, however, it began to appear to thinking people that the names of capital cities and of rivers did not really constitute the science of geography, and that the mechanical repetition of names did not stimulate thought. Although the advocates of the system fortified themselves with lists of other geographical terms, covering the subjects of bays and straits, capes, islands, etc., "singing geography" fell into disuse and has not been revived, except as an occasional and profitable recreation.

**Modern Ideas of Geography.**—Popular ideas of geographical teaching have changed materially within recent years. It is no longer the sole purpose to impart a knowledge of names, places, and boundaries, but to stimulate thought and inquiry, and to lead the pupil to a broader, better view of the great, living world of nations and peoples, with its varied resources, and its material, intellectual, and moral interests.

**Modern Recreations in Geography.**—The geographical recreations of the present day are numerous and engaging. Modern geography addresses itself to the youngest pupils, from their first admission to the school—long before they enter upon the study of a text-book on the subject; and in the correlation of studies of the present day, it is continued in some form throughout the course. In its relation to home and school surroundings, and, later, to history, past and current, and to the various natural sciences, it is a source of unfailing interest; and the recreations of which it admits are inexhaustible.

**Orientation.**—We have borrowed from the French and the Germans an expression which means the determination of the cardinal points of the compass. This is generally the first geographical lesson of the young pupil. He is taught to *orient* himself. A familiar picture represents a small child standing on an elevated place in the open air, in

the early morning, pointing with the right hand to the rising sun. His left hand is pointed to the west, where the sun will set. He faces the north, squarely, and his back is turned to the south. The picture makes a lasting impression upon the child; and Horace Mann has made use of the same idea in one of his famous addresses, as a moral inspiration to young men. "Young man," he exclaims, "open your heart before me for one moment, and let me write upon it these parting words: The gracious God has just called you into being; and during the few days you have lived, the greatest lesson you have learned is that you shall never die. All around your body the earth lies open and free, and you can go where you will. All around your spirit the universe lies open and free, and you can go where you will. *Orient yourself!*"

**Home Geography.** — The geography of the home, the school, and the neighborhood may be taught either with or without a text-book. However, it should precede in oral lessons the use of a book by the pupil, beginning in fact with his first advent at the school. When the pupil has learned to write and to draw, a pencil and notebook can be employed in early geographical lessons, in the drawing of simple maps of the school grounds and vicinity, and in making brief notes (under the teacher's direction) of the oral lessons on the subject.

A suitable syllabus for oral lessons, preceding the use of a text-book in geography, will contain many subjects which may be illustrated by objects and by drawings on the black-board, and will prove delightful recreations for the pupils of the first three or four grades. The following are a few of these:

A compass should be exhibited, and its importance explained; its great value to sailors, and its influence in extending navigation in early times. The means of orientation at night by finding the North Star (when the sky is clear) should be explained, and the position of the Dipper,



with its "pointers" indicating the position of the North Star, should be shown upon the board.

The idea of length should be developed by a measuring stick with inches, feet, and yards marked upon it. The judgment of length is cultivated by guesses of the length of objects, with tests following.

The determination of the time of day as told by a clock or watch should be explained and illustrated. A clock face, the hands of which may be easily moved to illustrate the various hours, is an excellent piece of apparatus for the purpose. In this connection the value of modern timepieces should be shown, and the older methods of measuring time illustrated by the use of a sandglass and a description of King Arthur's notched candles, as well as of sundials, which are still to be seen at times in parks and gardens. The use of sun marks on window sills may be illustrated, and it should be explained that there is generally a perceptible difference between high noon (noon by the sun) and noon by the clock, even where local time is adopted. The meaning of standard time should be made clear to young pupils. The ideas of time should be developed by noting the lapse of seconds and of minutes, accurately determined. The names of the days of the week and the names of the months also should be taught by a calendar.

**Geographical Readings by the Teacher.** — Descriptive selections may be read to young pupils from time to time from some interesting and suitable book. The child will be especially delighted to learn of the conditions and surroundings of the people in strange and distant lands; of modes of life unlike his own; of the natural features of countries which present a strong contrast to the scenes with which he is familiar. Books suitable for the purpose, and happily adapted to interest and instruct without bewildering the young pupil, are numerous and can be easily obtained by any teacher.

**Supplementary Reading for Pupils in Geography.** — Supplementary reading in relation to geography should be con-

tinued through the various grades. Brief selections may be read from time to time, either by the teacher or by some good reader of the class, in connection with the recitations. As a rule, however, it will be better for the teacher to direct the pupils in their general reading, so that time may be saved in the period of recitation. Then a mere reference may be made to the book or extract, when the subject to which it is related is presented to the class, and the pupils who have followed the suggestions of the teacher will readily understand the reference and perhaps will offer brief comments upon the composition. There are many short poems in American literature referring to geographical locations and to incidents connected with both geography and history. Among these are the following, to which the authors' names are attached:

<i>Barbara Frietchie</i> . . . . .	John G. Whittier.
<i>Skipper Ireson's Ride</i> . . . . .	John G. Whittier.
<i>The Lake of the Dismal Swamp</i> . . . . .	Thomas Moore.
<i>Rhode Island Coal</i> . . . . .	William Cullen Bryant.
<i>Monument Mountain</i> . . . . .	William Cullen Bryant.
<i>The Fisherman of Beaufort</i> . . . . .	Francis D. Gage.
<i>The Nadowessie Chieftain</i> . . . . .	Schiller.
<i>The Catawba River</i> . . . . .	J. S. Kidney.
<i>Through Minnehaha's Veil</i> . . . . .	Lucy Larcom.
<i>My Merrimac</i> . . . . .	Lucy Larcom.
<i>A Prairie Nest</i> . . . . .	Lucy Larcom.
<i>The Wreck</i> . . . . .	T. H. McHaughton.
<i>Dolores</i> . . . . .	C. F. Woolson.
<i>On the Heights of Mission Ridge</i> . . . . .	J. A. Signaigo.
<i>The Old Jewish Cemetery at Newport</i> . . . . .	Henry W. Longfellow.
<i>The Skeleton in Armor</i> . . . . .	Henry W. Longfellow.
<i>The Armory at Springfield</i> . . . . .	Henry W. Longfellow.
<i>By Chickamauga River</i> . . . . .	Hezekiah Butterworth.
<i>Lookout Mountain</i> . . . . .	George D. Prentice.
<i>The Mammoth Cave</i> . . . . .	George D. Prentice.
<i>Seneca Lake</i> . . . . .	George D. Prentice.
<i>Memphis</i> . . . . .	John T. Trowbridge.
<i>Kit Carson's Ride</i> . . . . .	Joaquin Miller.

Longfellow's collection of lyrics entitled *Poems of Place* is almost indispensable to the teacher for use in the manner indicated, and should constitute a part of the library of every school. Poems of place relating to Europe are common everywhere. Mrs. Norton's *Bingen on the Rhine*, Robert Browning's *Ride from Ghent to Aix*, Longfellow's *Nuremberg*, and scores of others, are easily accessible. *Childe Harold's Pilgrimage* will supply a series of beautiful poetical descriptions relating to places of historical interest in Europe.

In the teaching of geography it should be the object to induce the pupil to learn, not only what is contained in the text-book, but also something of the many interesting and curious facts, scraps of history and of folklore, that no single text-book should or could contain. In other words, in geography as in other topics, the pupil should be led to learn all he can learn with profit in relation to the subject.

Narratives of travel possess a charm for young readers. When skillfully and naturally written, they may be filled with geographical and historical information, and also with valuable moral lessons. Centuries ago it became the task of Fénelon, the great master of French prose, to instruct the grandson of the king of France in the subjects of classical geography, history, and mythology—studies which were accounted dull by most of the pupils of that day. The royal pupil of Fénelon was at first neither studious nor tractable. His teacher, however, found a means of awakening his interest, and soon transformed him into a most willing and diligent student. The means employed was the preparation of a narrative of great interest entitled *The Adventures of Télémaque*, which related the supposititious wanderings of the son of Ulysses throughout the ancient world in search of his lost father. Télémaque was represented as visiting many lands, and learning the history of each in his travels.

A great boon to American boys and girls were the juvenile

books of travel prepared in this country by Jacob Abbott, in the earlier decades. While the political and social conditions have changed in various countries since these books were written, the volumes are still prized by the young, and form a valuable aid to geographical study. Following Mr. Abbott, a number of other authors have written charming books of travel, combining entertainment with instruction, and having the same general purpose, though differing widely in plan. Among the most striking of these are the volumes of European travel comprising the series entitled, *Young America Abroad*, by William T. Adams (Oliver Optic). For older pupils more solid works of standard literature should be accessible. Among the books suitable for a school library, which throw light upon the subject of geography and afford entertaining and instructive reading in relation to the study, are the following:

<i>The Florence Stories</i> . . . . .	Jacob Abbott.
<i>Rollo's Tour in Europe</i> . . . . .	Jacob Abbott.
<i>The Marco Paul Books</i> . . . . .	Jacob Abbott.
<i>The Young Yägers</i> . . . . .	Capt. Mayne Reid.
<i>The Cliff Climbers</i> . . . . .	Capt. Mayne Reid.
<i>Odd People</i> . . . . .	Capt. Mayne Reid.
<i>Afloat in the Forest</i> . . . . .	Capt. Mayne Reid.
<i>Young America Abroad</i> . . . . .	William T. Adams.
<i>The Boy Travelers</i> . . . . .	Knox.
<i>Young Folks Abroad</i> . . . . .	McCabe.
<i>Little People of Asia</i> . . . . .	Miller.
<i>Homes of Americans</i> . . . . .	Lamb.
<i>Northern Pacific Railroad</i> . . . . .	Smalley.
<i>The New South</i> . . . . .	King.
<i>Brazil</i> . . . . .	Smith.
<i>South America</i> . . . . .	Bates.
<i>Africa</i> . . . . .	Jones.
<i>Up the Nile</i> . . . . .	Edwards.
<i>Egypt</i> . . . . .	Loring.
<i>China</i> . . . . .	Colquhoun.
<i>The Middle Kingdom</i> . . . . .	Williams.
<i>Illustrated India</i> . . . . .	Stone.
<i>Japan and the Japanese</i> . . . . .	Humbert.

<i>China and Japan</i> . . . . .	Oliver.
<i>The Far East</i> . . . . .	Macleod.
<i>Rivers of France</i> . . . . .	Turner.
<i>A Tour of Greece</i> . . . . .	Farrar.
<i>Voyage in the Sunbeam</i> . . . . .	Mrs. Brassey.
<i>Land of the Midnight Sun</i> . . . . .	Du Chaillu.
<i>Spanish Vistas</i> . . . . .	Lathrop.
<i>Alaska</i> . . . . .	Jackson.
<i>Across the Continent</i> . . . . .	Bowles.
<i>Life in the Rocky Mountains</i> . . . . .	Miss Bird.
<i>Three Years in Mexico</i> . . . . .	Stephens.
<i>Greenland</i> . . . . .	Rink.
<i>Home Life in Germany</i> . . . . .	Brace.
<i>Walks in Rome</i> . . . . .	Hare.
<i>Russia</i> . . . . .	Wallace.
<i>Boys of Other Countries</i> . . . . .	Taylor.
<i>Through and Through the Tropics</i> . . . . .	Vincent.
<i>The Bottom of the Sea</i> . . . . .	Sourel.
<i>Algeria</i> . . . . .	Herbert.
<i>The West</i> . . . . .	Porter.
<i>Romance of Natural History</i> . . . . .	Gosse.
<i>Animal Sagacity</i> . . . . .	Hall.
<i>Earth, Sea, and Sky</i> . . . . .	Northrop.
<i>The Water World</i> . . . . .	Van Dervoort.
<i>Zigzag Journeys</i> . . . . .	Butterworth.
<i>Days and Nights in the Tropics</i> . . . . .	Oswald.
<i>Spectacles for Young Eyes</i> . . . . .	Sander.

**Imaginary Journeys of the Classes.**—Imaginary journeys of the teacher and class add vividness to descriptions and give connection to ideas.

With very young pupils in a country or village school, the imaginary journeys may include only a walk down a road or street already somewhat familiar to all. It may be extended later into a visit to some neighboring town or city, or a trip by rail or by steamboat, and still later into excursions to other States and countries. The following pertinent suggestion is contained in the *Report of the Committee of Ten*:

“The teacher can economize time in recitation by using the facts gained by a study of the assigned lesson as a point

of departure for the purpose of leading on to additional facts and causes and results, for making comparisons, and for stimulating fresh thought upon the subject, instead of going over the subject solely to test the pupils' memory and faithfulness. As an illustration, the class having learned what they can about the Mississippi River, instead of spending half an hour asking pupils in turn the length of the river, where it rises, between what States it flows, and into what body of water it empties, the teacher and the class may take an imaginary ride from the Falls of St. Anthony down the river, and develop the facts connected with its course and their applications in a graphic and realistic way from the imaginary deck of a steamer."

Imaginary journeys should include a description of the country through which they are made; its natural features, the character of its soil and products; the scenery to be viewed; the cities and other notable places of interest through which the journey lies. The journey by rail from New York to Chicago will suppose a passage through the garden State of New Jersey, the coal, iron, and wheat tracts of Pennsylvania, the farming lands of Ohio and Indiana, and the lake shore of Illinois. The varied resources and industries of the region through which this route passes; the rivers and mountains, and their characteristics; the size of the various cities, some of their famous buildings, salient points of their history, and the more notable advantages which they possess for trade, manufacture, and other industries; the elevation and drainage of the various tracts; connecting lines of transportation at different points, etc., may be considered connectedly in this manner.

For the older pupils an imaginary journey through Europe, including the leading points of interest in each country, will prove a source of delight, and will greatly heighten the pleasure which may be derived, later, by those who may have an opportunity to make a real visit to any of the countries thus studied.

**Chart Journeys.** — Entertaining charts,<sup>1</sup> which may be used with young pupils for ideal journeys, can be procured in the form of bird's-eye views — colored pictures, which appeal strongly to the eye, and which represent in miniature the natural features of the land and water, together with cities, railways and canals, bridges and tunnels, aqueducts, mines and derricks, oil wells, factories, elevators, etc.

**Sample Products.** — Teachers often add interest to the study of localities by exhibiting samples of their products. Thus specimens of growing cotton are subjects of curious interest in our Northern States, as are minerals from the mining regions, to pupils where mines are unknown.

Samples of anthracite and bituminous coal, block, and cannel coal should be exhibited to pupils, in connection with the study of the States from which, chiefly, these products are obtained; also vials of the crude petroleum and of quicksilver, and specimens of the principal ores for which localities are famous.

Small vials of port and sherry wines, and of olive oil, with samples of olives, pomegranates, and raisins, and Spanish (merino) wool, have been used at times, to illustrate the industries of Spain and Portugal; dates and tamarinds, and bits of leather, to illustrate the exports of Morocco; small samples of teas, porcelain ware, fans, dolls, and various characteristic manufactured articles, to illustrate the products of China, etc. Coins and postage stamps of foreign nations possess considerable interest, and are not difficult to obtain. School books of foreign countries (which are almost invariably inferior in appearance to those used in the United States) are of interest in connection with the study of such countries, as also are foreign newspapers and periodicals.

**Observation of the Weather.** — Whether physical geography be or be not taught in any school as a distinct

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<sup>1</sup> The geographical chart prepared to accompany Monteith's *Geographical Reader* will be found valuable for this purpose.

study, the pupils of the school should acquire some practical knowledge of meteorology and climatic conditions. Generally the teacher can add materially to the statements on the subjects which are contained in the text-book of geography in use. Every school is supposed to be supplied with a thermometer, and the pupils should become accustomed to the intelligent use of this instrument. It is well for them to become acquainted with the barometer also. It will be a good plan for them to observe systematically, and to record for a few days, the readings of these instruments. The use of weather maps of the Signal Service should be explained and illustrated. The whole process of evaporation, cloud formation, and the precipitation of rain, hail, and snow, may be easily explained and illustrated by familiar examples.

An excellent opportunity for teaching these subjects is offered on a rainy day. A wet garment is hung up to dry, and the question suggests itself, What has become of the water which has thus disappeared? The indications of a coming storm will be found generally in a barometer and thermometer. The teacher who has a knowledge of the different forms of clouds, and their height above the ground, can impart this knowledge best by pointing to the specific forms of clouds while describing them. The distance of the lightning stroke, as measured by the interval elapsing between the flash and the accompanying report, can be calculated at the time of the storm, and will frequently be a means of relief to the more timid of the pupils at such times. The first snowstorm offers an excellent opportunity for explaining the formation of snow and ice, and something of the crystals which compose them. The deposition of the dew, and also the use of the hydrometer, may be explained advantageously, if the teacher be in possession of that instrument.

The signal service of the United States has been developed to a very high state of efficiency within recent years,



and the state of the weather is predicted with great confidence for some time in advance. The greater part of the adult population has become acquainted with the established signals relating to the weather, and these should be explained to the pupils of every school. The various weather flags and their significance can be drawn upon the blackboard or reproduced in cloth for use in such instruction.

In studying the climates of the various nations, attention should be given to the climatic influences, not only upon the occupations, dress, and social habits of the people, but also upon their dispositions, their character, and their amusements.

**Duplicate Geographical Names.** — In a number of instances the names given in school geographies are not the only ones applied to the same geographical use. European dispatches sometimes refer to the German Ocean, meaning the North Sea. Mention is made occasionally of the Vermilion Sea, when the Gulf of California is intended. References to Surinam are not always understood as referring to Dutch Guiana. The ancient name Euxine is still applied, sometimes, to the Black Sea. The old name New Holland, formerly given to Australia, is yet met with occasionally. Other instances of names unfamiliar to the classes in geography may be added to these. Such names may be given to pupils as a test of their ability to hunt out the meanings and application.

**Poetical Names of Countries.** — In poetry and song we find that many lands are called by unofficial names, generally of Latin form, and often the designations employed in ages past. Thus Wales is spoken of as Cambria; a part of the Austrian Empire, as Pannonia; England, as Britannia; Scotland, as Caledonia or Scotia; Greece, as Hellas; Germany, as Germania; Ireland, as Hibernia; Holland, as Batavia; Switzerland, as Helvetia; Spain, as Iberia; the United States, as Columbia, etc.

In order that the pupil may understand poetical allusions, it is important that these designations be explained by the teacher; for often the pupil will not find the meanings otherwise.

**National Airs.** — National songs and marches are of interest in connection with the study of the countries to which they relate, and of these appropriate mention may be made. *The Watch on the Rhine* of the Germans, the *Marseillaise Hymn* of the French, the *Russian March*, *God Save the Emperor Francis* of the Austrians, *God Save the Queen and Rule, Britannia*, of the British, *Yankee Doodle*, *Dixie's Land*, and *America* of our own nation, and others, are all more or less familiar.

**Foreign Names of Cities.** — The names of cities in foreign lands are not always spelled or pronounced in English as they are in the countries in which the cities themselves are located. Frequently the difference in the spelling is such that the foreign name is not recognized from any resemblance which it bears to the English orthography. The following are a few instances of the various forms of the same name :

ENGLISH.	FOREIGN.
Copenhagen . . . . .	Kjöbenhavn.
Cologne . . . . .	Koln.
Florence . . . . .	Firenze.
Leghorn . . . . .	Livorno.
Antwerp . . . . .	Anvers.
Ghent . . . . .	Gand.
Warsaw . . . . .	Varsovie.
Vienna . . . . .	Wien.
Constantinople . . . . .	Stamboul.
Morocco . . . . .	Maroc.
Naples . . . . .	Napoli.
Venice . . . . .	Venezia.
Lisbon . . . . .	Lisboa.
Lyons . . . . .	Lyonnais.
Leipsic . . . . .	Leipzig.
Havana . . . . .	Habana.

The foreign forms of such names will possess interest to pupils of an advanced class. Often these forms are to be seen in the mailing stamps of letters received from the Old World, in trade-marks upon imported articles of commerce, and in the imprint upon the title-pages of books printed in other countries.

**The Meanings of Geographical Terms.** — The etymologies of geographical names are often interesting and significant. It is unknown to many scholars that one of our States is named indirectly for Julius Cæsar. The word *Jersey* is a corruption of *Cæsaria*, which in ancient times was conferred upon one of the islands in the English Channel in honor of the great Roman conqueror. Since New Jersey derived its name from that island, the Latin form of the name of the State is *Nova* (new) *Cæsaria*.

*Chester* or *caster*, in the terminations of various names of cities (as Winchester, Colchester, Lancaster, etc.), is a corruption of the Latin word *castra*, meaning a "camp," and is a relic of the Roman conquest of Britain.

York is a corruption of the Latin name *Eboracum*, applied to a town in ancient Britain. The Latin name of New York is *Novum Eboracum*.

*Philadelphia*, derived from two Greek words, signifies "brotherly love."

*Ben* is an old Celtic word, signifying a "hill" or "mountain," and is found in Benlomond, Bennevis, etc.

*Polis* (sometimes corrupted into *ple* or abbreviated into *pol*) is a Greek word signifying "city." It is seen in such names as Indianapolis, Minneapolis, Annapolis, Constantinople, Adrianople, Sebastopol, etc.

*Burg*, *burgh*, *borough*, *boro*, *bury*, etc., are derived from an old Germanic word meaning a "castle" or "fortification." These endings are found in many names of cities and counties, as Pittsburg, Edinburgh, Middlebury, Murfreesboro, Hamburg, etc. An etymological vocabulary of modern geographical names was contained in Webster's *Unabridged*

*Dictionary*, but has been dropped from the *International*. The original significance of geographical names is not of much importance. In the case of names derived from ancient Latin terms, the original forms are still used in compositions written in Latin, such as diplomas of colleges, and certain other documents; and sometimes they appear on official seals.

**Sportive Geographical Names.**—The American love of humor is seen in the sportive appellations given to certain of our States. Some of these are to be found among the following popular designations:

Maine . . . . .	The Pine Tree State.
New Hampshire . . . .	The Old Granite State.
Vermont . . . . .	The Green Mountain State.
Massachusetts . . . . .	The Bay State.
Connecticut . . . . .	The Nutmeg State.
Rhode Island . . . . .	Little Rhody.
New York . . . . .	The Empire State.
New Jersey . . . . .	The Garden State.
Pennsylvania . . . . .	The Keystone State.
Delaware . . . . .	The Blue Hen.
Virginia . . . . .	The Old Dominion.
North Carolina . . . .	The Old North State.
South Carolina . . . .	The Palmetto State.
Indiana . . . . .	The Hoosier State.
Kentucky . . . . .	The Dark and Bloody Ground.
Michigan . . . . .	The Wolverine State.
Wisconsin . . . . .	The Badger State.
Iowa . . . . .	The Hawkeye State.
California . . . . .	The Golden State.

Many American cities have acquired humorous or poetic designations, which have become popularized throughout the country. Among these are the following:

New York City . . . .	Gotham.
Boston . . . . .	The Hub.
Philadelphia . . . . .	The City of Brotherly Love.
Pittsburg . . . . .	The Smoky City.

Chicago . . . . .	The Garden City.
Cincinnati . . . . .	The Queen City.
Detroit . . . . .	The City of the Straits.
New Orleans . . . . .	The Crescent City.
Lowell . . . . .	The City of Spindles.
Nashville . . . . .	The City of Rocks.
Duluth . . . . .	The Zenith City.
New Haven . . . . .	The City of Elms.
Little Rock . . . . .	The City of Roses.

**Indian Names.** — About half the States and Territories of the Union have names derived from the language of the aborigines, and the same is true of a great number of cities, towns, and counties. In thousands of instances the old Indian names are retained for mountains, hills, rivers, waterfalls, etc. Generally these names are musical in sound and apposite in their meaning. There is an increasing disposition to restore Indian names of localities which have been discarded. When the red man shall have disappeared, traces of his occupation will be found in every part of the country in the beautiful descriptive names which he bestowed. The following examples are illustrative of the poetical character of these designations:

Alabama,	meaning	" Here we rest."
Alleghany,	"	" River of the Alligewi tribe."
Athabasca,	"	" Swampy."
Connecticut,	"	" Upon the long river."
Chautauqua,	"	" Foggy place."
Dakota,	"	" Allied."
Illinois,	"	" Tribe of men."
Iowa,	"	" The sleepy ones."
Katahdin,	"	" The highest place."
Michigan,	"	" Weir for fish."
Massachusetts,	"	" The blue hills."
Merrimac,	"	" The swift river."
Mississippi,	"	" The great and long river."
Missouri,	"	" Great and muddy."
Minnesota,	"	" Foaming water."
Minnehaha,	"	" Laughing water."

Nahant,	meaning	" At the point."
Nebraska,	"	" Shallow water."
Nashota,	"	" Twins."
Niagara,	"	" Neck of water."
Ottawa,	"	" Traders."
Ohio,	"	" The beautiful."
Ontario,	"	" A village on a mountain."
Penobscot,	"	" Rock-lined."
Poughkeepsie,	"	" Shallow inlet."
Rappahannock,	"	" River of quick-rising waters."
Roanoke,	"	" Seashell."
Sandusky,	"	" Cold spring."
Saratoga,	"	" Miraculous water in a rock."
Tennessee,	"	" River of the big bend."
Wisconsin,	"	" Wild rushing channel."
Wachusett,	"	" The mountain."

The following poem, by Mrs. L. H. Sigourney, expresses the fondness of Americans for the Indian names :

Ye say they all have passed away,  
 That noble race and brave,  
 That their light canoes have vanished  
 From off the crested wave ;  
 That 'mid the forest where they roamed  
 There rings no hunter's shout ;  
 But their name is on your waters,  
 You may not wash it out.

'Tis where Ontario's billow  
 Like ocean's surge is curled,  
 Where strong Niagara's thunders wake  
 The echo of the world ;  
 Where red Missouri bringeth  
 Rich tribute from the west,  
 And Rappahannock sweetly sleeps  
 On green Virginia's breast.

Ye say their cone-like cabins,  
 That clustered o'er the vale,  
 Have fled away like withered leaves  
 Before the autumn's gale ;

But their memory liveth on your hills,  
 Their baptism on your shore,  
 Your everlasting rivers speak  
 Their dialect of yore.

Old Massachusetts wears it  
 Within her lordly crown,  
 And broad Ohio bears it  
 'Mid all her young renown ;  
 Connecticut hath wreathed it  
 Where her quiet foliage waves,  
 And bold Kentucky breathes it hoarse  
 Through all her ancient caves.

Wachusset hides its lingering voice  
 Within his rocky heart,  
 And Alleghany graves its tone  
 Throughout his lofty chart.  
 Monadnock on his forehead hoar  
 Doth seal the sacred trust —  
 Your mountains build their monument,  
 Though ye destroy their dust.

**The Pronunciation of Geographical Names.** — There can be no general rule for the spelling or pronunciation of geographical names. Many circumstances have to be taken into consideration by the lexicographer or the geographer in giving the weight of his authority to the orthography in any case of divided usage.

Originally most geographical names possessed a significance of their own. In very many instances this is now perverted or wholly lost. As population shifts, and different languages successively prevail in the same region, the geographical names undergo marked changes of pronunciation, and often of spelling as well. The Romans gave the name *Alta Ripa* (meaning "high bank") to a place on the Rhine River. The Germans, who later occupied the spot, did not catch the name exactly, and called the name *Altrippen*, which signifies "old ribs." Similarly, the English in Britain did not quite apprehend the name of the Hills of

Ostarius (so called for the Roman general of that name who occupied them in ancient days), but called them *Oyster Hills*.

The Norman-French conquerors of England gave the name *Chateau Vert* (meaning "green castle") to a striking and beautiful hill in Oxfordshire. The English, neither understanding the meaning nor quite catching the sound of this French name, called the hill *Shotover*.

In our own country the French, who formerly owned the valley of the Mississippi, have left to us a number of names which American settlers did not pronounce after the manner of the French — though they retained the original spelling; such names as Joliet, Des Plaines, Prairie du Chien, Du-buque, etc. In some instances we have made a compromise in the matter of pronunciation, as in the case of Charlevoix, St. Croix, Illinois, etc.

In instances where the change in population was not abrupt, and where there has been a continuous population to hand down the original pronunciation, the latter has been retained. Such an instance is that of Arkansas, which was first settled more than two centuries ago, and in which a continuous white population, gradually merging from French to English, handed down the old pronunciation "Arkansaw."

Sometimes the historic pronunciation of a word is changed through carelessness in transplanting it to a new country. The name *Elgin*, in Scotland, is pronounced with the hard sound of the letter *g*. When applied to a city in Illinois, it was pronounced as though it were spelt *Eljin*, the change arising accidentally through a want of familiarity with the Scotch usage. In the same way the name of *Cairo*, in Illinois, although derived from the capital city of Egypt, has acquired a distinct pronunciation of its own.

There are many similar instances throughout the country. The development of the United States has been so rapid that men and companies engaged in opening up to settlement new tracts of country have been at a loss to meet the



requirement for new names of stations and towns, and have had recourse to maps of the Old World, selecting often at random names of which the true pronunciation was unfamiliar. Sometimes there have been later attempts to revert to the original pronunciation. While these have been in a measure successful in some instances, they have generally failed. In a number of cases the names of cities, towns, etc. are variously pronounced, and their true pronunciation is a matter of opinion, the arguments in the case being nearly balanced, and the opinions of authorities disagreeing.

**Later Tendencies of Geographical Pronunciation.** — In the matter of foreign names there is now a tendency to spell and to pronounce them more nearly in accordance with the usage of the countries to which they relate. The name of the long and narrow South American republic is now more frequently written *Chile* (instead of *Chili*), and pronounced in the Spanish way. There is a growing disposition to make two syllables of the name of the German river *Elbe*. Various instances of this tendency are to be seen, though sweeping changes of this nature are not apt to be suddenly made.

Much more attention is paid now than formerly in schools to the correct pronunciation of geographical names, according to the best authorities. As a geographical recreation, an occasional review exercise in the spelling or pronunciation of such names is both interesting and profitable.

**Some Curious Geographical Names.** — Amusing accounts are given of the origin of some geographical names, as the following will show :

An early exploring party of Spaniards, passing the great peninsula at the south entrance to the Gulf of Mexico, made a brief landing to inquire the name of the country, but neglected to ascertain if they were understood.

"What is the name of this country?" was asked of the first native they met.

"*Juca tan?*" ("What do you say?") was asked in turn in the native tongue.

"The natives say the name of the country is *Yucatan*," reported the well-satisfied investigators. This name the peninsula has borne from that day.

When Lewis Cass, the great statesman of Michigan, was exploring the head waters of the Mississippi, many years ago, he determined to give to the lake a name which should indicate that it was the true head of the great river.

"What are the Latin words for *true head*?" he asked of the most scholarly of his companions.

"*Veritas* and *caput*," was the blundering reply. *Veritas-caput* being deemed too long a name, the word was clipped at both ends, and the name *Itasca* was applied to the lake.

Had the reply been correct, and the word *verum* substituted for *veritas*, probably we now should be calling the lake by the less euphonious name of *Umca*.

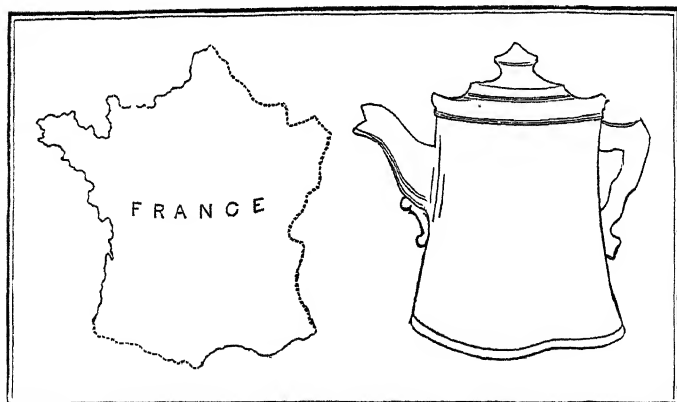
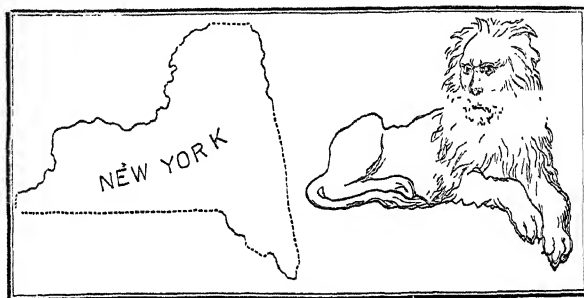
It will be remembered that the name *America* was applied originally to this country in error, thus giving to a pickle dealer of Seville, in Spain, the honor which should have belonged to Columbus.

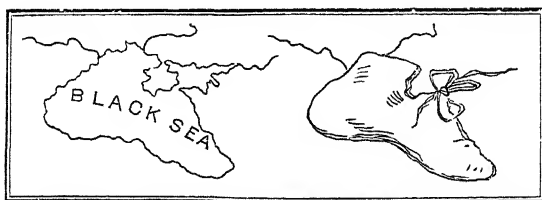
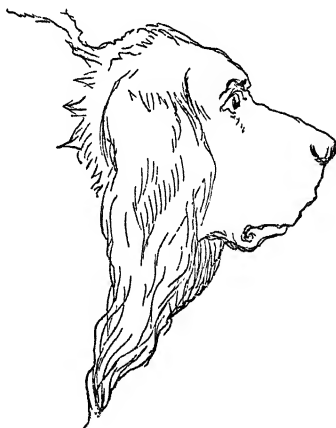
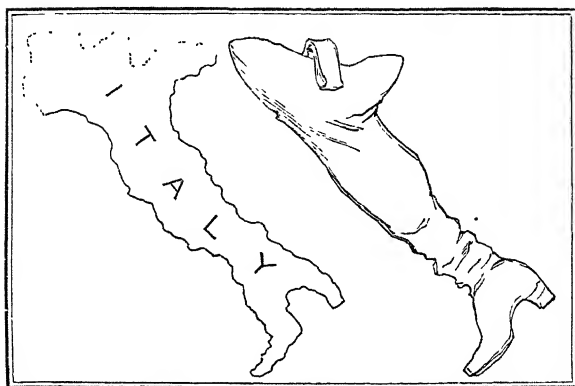
**Humorous Geographical Pictures.**—Clever artists have sometimes amused pupils by comparing outline maps of geographical divisions with drawings of various figures of similar shape. Often this can be done by a few skillful strokes of the crayon. Thus Italy is compared to a long hunting boot, France to an ice pitcher, New York to a lion, Virginia to a camel, Lake Ontario to a seal, Lakes Erie and St. Clair to a whale, the Adriatic Sea to the same, the Sea of Japan to a rabbit, Corsica to a hand, New Guinea to a guinea fowl, etc.

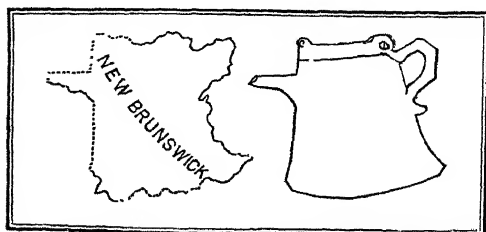
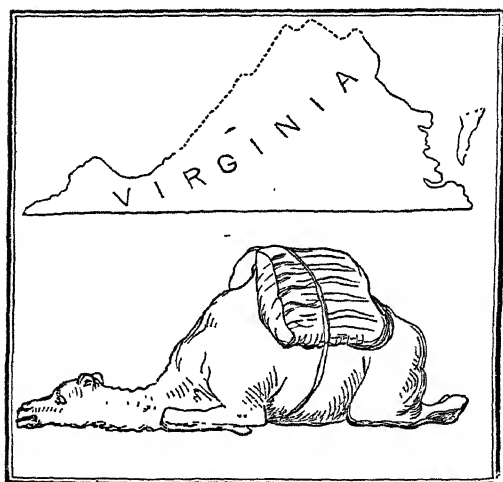
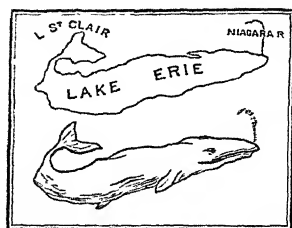
Such drawings afford amusement, and help to fix in the mind the figures of the divisions thus compared. Following are some of the drawings above described:<sup>1</sup>

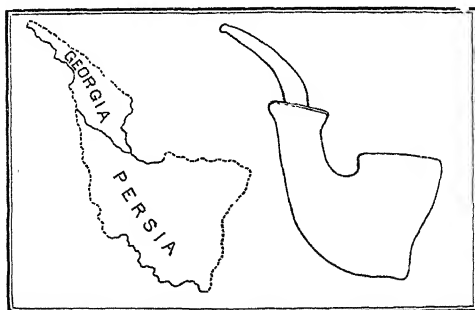
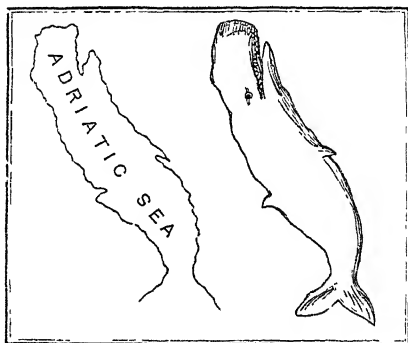
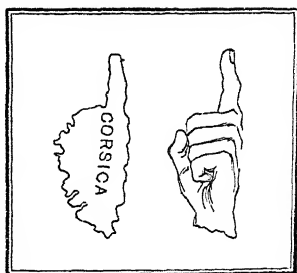
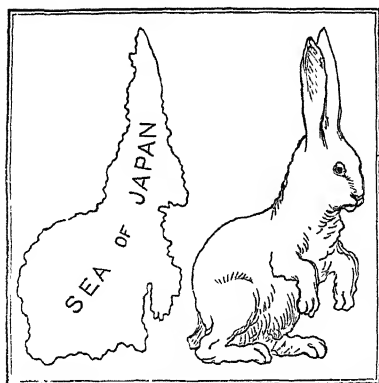
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<sup>1</sup> These drawings are taken, for the most part, from Monteith's *Manual of Geography*.









**Modeling Relief Maps.** — Clay and sand modeling, which are employed extensively in some countries in the study of geography, are coming into more general favor in the United States, although, unfortunately, they have not met with very general acceptance. Damp clay and wet sand are admirably suited for the construction of relief maps. Plaster of Paris is sometimes used for this purpose, but without success in many cases, since it becomes hard too quickly.

Modeling clay is used on a flat surface, and is modeled into relief illustrative of the various regions studied. The same clay may be used many times by the same pupil. The map is to be compared with an accurate model, and corrected as often as may be necessary. The construction of such a map will effectually fix in the mind the principal slopes, mountain ranges, and river systems. The more important cities may be indicated, thus completing the work.

The principal objection to this form of work is that it requires too much time. Many experiments and essays must be made before the pupil acquires sufficient skill to construct such a map with accuracy, even though he have a good idea as to what he is to do. Often it is found best to encourage the pupil to perform such work at home, and out of school hours. Where it is deemed impracticable for the pupils generally to model in clay, it is still desirable that samples of such work be exhibited to them, and nearly always there will be some pupils who are favorably situated for such work, and who will gladly prepare the specimens if encouraged by the teacher to do so.

**Relief Globes.** — Relief globes for school use are of recent manufacture, and are exceedingly desirable for any school. Unfortunately, their cost at the present time renders them unavailable for very general use.

**Outline Maps.** — Outline maps on slate surfaces, to be filled in by the use of crayons, have not become very popular in this country, although they are used extensively in Europe. It is an excellent exercise for the pupil to draw the outline

as well as the internal features of a country. But the drawing of coast lines is slow and somewhat laborious, and ought not to be repeated frequently, while various uses might be made of the same outline in the representation of political divisions, relief, and the distribution of coal fields, and of important agricultural products, etc.

Outline maps in cheap form (in sheets) can be procured, to be filled in by the pencil, and can be used in various ways. A set of five such maps of the United States may be made to form a series, as follows:

The first, showing the different States, their capitals, and two or three other (principal) cities of each State; also the principal mountains, rivers, and railway lines of the country.

The second, showing the distribution of the principal mineral resources of the country.

The third, showing the distribution of the principal agricultural products, and of the common forest trees.

The fourth, showing the distribution of the more important domestic animals, and of some of the wild animals.

The fifth, showing the original territory of the United States, and the successive accessions thereto.

Each State is to be marked with the date of its admission to the Union, and also (generally) with the date of its earliest settlement.

Pale colors may be used advantageously in some of these maps. Map drawing, when neatly performed, may prove a very satisfactory recreation, and specimens of good work in this line are well worth preserving.

**Modern Text-books of Geography.**—The study of geography has been practically revolutionized within a recent period. Every possible aid is now given to the study of that subject, and many different methods are employed in its presentation. The modern text-book is in itself a marvel. It not only presents the natural features of the earth's surface, the political divisions, and the location of



the various points of geographical interest, but considers also the nature and condition of the soil; the physical, and to some extent the geological, features of the various countries. It treats of their resources—natural and industrial—and to some extent of the character of their civilization.

**Variety in the Recitation.**—It would seem that but little can be added to make the study more effective or more attractive. There are some features, however, which it might be well to emphasize. A change in the manner of recitation, from time to time, is an excellent thing. Probably this is more necessary in geography than in any other study, for there has been a strong tendency to routine work in this branch. Among the variations, or recreations, which may be employed is the following, which presupposes on the part of the teacher the ability to draw maps, and to draw them quickly and accurately. After the class has studied a given map, or a set of maps, let the teacher sketch rapidly upon the board a map of some geographical division. As he proceeds, let the pupils give the name of the country. The teacher can then sketch in, as rapidly as possible, the principal rivers, mountains, cities, etc., and, if the map be of an entire country, the various political divisions—the pupils naming these as soon as they are drawn. If the naming be done in concert, there will be some in the class who will do all the work, of course. This may be avoided by calling upon different pupils for the names, as the work of sketching proceeds.

**Observational Geography.**—The study of the configuration of the earth's surface may well begin with the surrounding locality. Here the teacher in the country has the advantage. In the city—the large city—all is artificial. The streets are made level; the watershed is the gutter, constructed in accordance with surveys; all the surface water is carried to the sewers. On all sides are the results of the labors of men. In the country, however, everything is

open to the inspection and investigation of the teacher and his class. Many localities are especially adapted to the study of geography from nature. It is possible that some sections of the country are so little diversified that but little can be learned from observation of the slope of the ground. This is true of large portions of certain States in the West. Ordinarily, however, the class may learn the direction of the water courses from the ravines and the little streams, and can determine thus the general slope of the ground. The pupils will learn, too, how river beds are formed and how deposits are made in them. Much may be learned of the character of the soil, the subsoil and the rocks underneath. The growth of the native plants may be studied and the differences noted between those that grow on the hills and those that are found in the marshes or river bottoms. The township, and even the county perhaps, may be made the basis for the practical study of geography by observation. The pupils should be trained in all their powers of observation, and their investigations should be as thorough as if they were exploring an entirely new country of which a map was to be made the first time.

**Compositions on Geographical Topics.**—There is nothing that will fix so well in the pupil's mind the things about which he has been studying, as a composition of his own. It is a good plan for pupils of higher classes, especially, to prepare compositions that will embody all of the pupil's knowledge upon a given subject, and that will cause him to make an effort to increase his stock of knowledge. The subjects for such compositions may be taken from all parts of the geography. A brief list which is appended here will illustrate how much may properly be included in these essays.

Oyster Farming.  
Coal Mining.  
Farming in the West.  
How Shoes are Made.

Salmon Fishing.  
The Manufacture of Iron.  
Copper Mining.  
Log Cutting and Lumber Making.

Ocean Currents.

The New York Central Railway.

Clouds.

Deep-sea Life.

Trade Winds.

Japan.

Life on a Ranch.

Sugar Making.

A California Fruit Farm.

The Industries of the Middle States.

How Rice and Cotton are Grown.

Lake Ports and Lake Trade.

**Physiographic Topics.** — The action of constant and intermittent springs may be illustrated by the use of siphons; and constant currents of wind, by currents of heated and cold air.

The pupil should learn something, too, of the formation of the earth's crust; the long period of time which has been required for the formation; when the successive forms of life appeared, and what they were. The formation of the mountains may be illustrated by the crushing of a sheet of paper.

The location of the chief supplies of common minerals should be explained. The most useful of these are, in general, the most easily obtained, and are deposited in the largest quantities. An interesting talk may be given upon the form in which the different minerals occur. Gold is found pure, or nearly so; iron, always in combination. Gold, by its chemical nature, forms few compounds; especially, it does not unite readily with oxygen. Iron forms compounds easily and quickly. It follows that, where gold is found in combination with other elements, it is very hard to reduce it, while iron ores may be separated with comparative ease.

Another interesting topic for discussion (although perhaps sufficient time can hardly be spared to make it a part of the regular recitation) is the bottom of the sea, and deep-sea life. The sea has its mountains and its valleys, as well as the land. The Atlantic cable is laid upon a mountainous ridge, or plateau. In some places the bottom of the ocean cannot be reached. Many curious forms of animal and

plant life, fishes that rival the monsters of prehistoric days in everything except size, and strange plants that move about from place to place are found in the sea.

When teaching physical geography, the instructor should explain, wherever possible, the relation of geography to the other sciences. When teaching descriptive geography, he should bring in history constantly as an aid to the study. This should embrace not only the history of places and events, but also of peoples and nations.

**The Correlation of Geography and History.** — The customs and life of the American Indians will account for their disappearance as they come in contact with a stronger race. In the same way the mode of living and the race characteristics will account for the stationary position or retrograde movement of the Turks in Europe during the past few centuries.

Historical themes in a recitation in geography should be presented briefly. They may include racial peculiarities and national customs, with perhaps a few characteristic legends and beliefs. To this may be added the influence of geographical surroundings upon the people and their habits. The natural features of the earth have been the causes (indirect, perhaps) of the great differences existing among the various peoples of the world.

**Rulers of the Nations.** — It is well for both teacher and pupils to possess some knowledge of the chief rulers of the leading countries of the world; also to have at hand, for ready reference, the names of rulers of less important political divisions, in order that they may be able to understand the press dispatches. Sometimes very insignificant rulers become exceedingly prominent in the political world, being concerned in the interests of the great nations. The prominence within late years of the former queen of the tiny kingdom of Hawaii will not be soon forgotten. Following is a list of the heads of the governments of the world, prepared at the beginning of the year 1895. By

making note, from time to time, of any changes that occur, the teacher can be always supplied with this desirable information for ready reference.

COUNTRY.	OFFICIAL HEAD.	TITLE.	ACCESSION.
Abyssinia .....	Menelek II.....	Emperor .....	March 12, 1889.
Afghanistan ...	Abdur Rahman Khan.	Amir .....	July 22, 1880.
Annam.....	Bun-Can.....	King .....	January 31, 1889.
Argentine Republic.	Señor Urriburu.	President.....	January 22, 1895.
Austria-Hungary ..	Francis Joseph.....	Emperor .....	December 2, 1848.
Baluchistan .....	Mir Muhammad.....	Khan.....	August, 1893.
Belgium.....	Leopold II.....	King .....	December 10, 1865
Bokhara.....	Seid Abdul Ahad....	Amir .....	November 12, 1885.
Bolivia .....	Gen. Alonzo.....	President.....	August 17, 1894.
Borneo .....	Hasim Jalil Al Alam Akamaldin.....	Sultan.....	May, 1885.
Brazil .....	Prudente De Moraes..	President.....	November 15, 1894.
British Empire.....	Victoria .....	Empress-Queen....	June 20, 1837.
Bulgaria.....	Ferdinand of Saxe- Coburg .....	Prince.....	August 11, 1887.
Chile .....	Admiral Jorge Montt	President.....	December 26, 1891.
China .....	Kuang Hsu.....	Emperor.....	January 12, 1875.
Colombia .....	Miguel A. Caro.....	President .....	August 10, 1894.
Congo Free State ..	Leopold .....	Sovereign.....	April 30, 1885.
Corea .....	Li-Hsi .....	King.....	January, 1864.
Costa Rica .....	Rafael Iglesias.....	President.....	May 8, 1894.
Denmark.....	Christian IX.....	King .....	November 15, 1863.
Dominica ... ..	Ulises Heuraux .....	President.....	September 1, 1886.
Dominion of Canada.	Lord Aberdeen .....	Governor-General..	September, 1893.
Ecuador.....	Luis Cordero.....	President.....	July 1, 1892.
Egypt.. .....	Abbas Pacha.....	Khedive.....	January 7, 1892.
France .....	François Felix Faure.	President.....	January 17, 1895.
Germany.....	William II.....	Emperor.....	June 15, 1888.
Greece .....	George I.....	King .....	October 31, 1863.
Guatemala .....	J. M. Reina Barrios..	President .....	March 15, 1892.
Haiti .....	Louis M. F. Hyppolite	President.....	May 15, 1890.
Hawaii .....	Sanford B. Dole .....	President.....	July 4, 1894.
Honduras.....	Policarpo Bonilla....	President.....	November, 1894.
India.....	Earl of Elgin.....	Governor-General..	October, 1893.
Italy .....	Humbert .....	King .....	January 9, 1878.
Japan .....	Mutsu Hito.....	Emperor.....	February 13, 1867.
Khiva .....	Seid Mehemed Rehim.	Khan.....	1865.
Liberia .....	J. J. Cheeseman.....	President.....	January 7, 1892.
Luxemburg.....	Adolph (Duke of Nas- san).....	Grand Duke .....	November 23, 1890.
Madagascar.....	Ranavalona III.....	Queen. ....	July 13, 1883.

COUNTRY.	OFFICIAL HEAD.	TITLE.	ACCESSION
Mexico .....	D. Porfirio Diaz... ..	President.. . . .	December 1, 1892
Monaco .....	Albert .....	Prince .....	September 10, 1889.
Montenegro .....	Nicholas I. . . . .	Prince..... . .	August 14, 1860.
Morocco .....	Mulai Abdul Aziz ...	Sultan.. . . . .	June 11, 1894.
Netherlands ....	Wilhelmina .....	Queen..... . . .	November 23, 1890
Nicaragua.....	José Santos Zelaya..	President..... .	October, 1893.
Orange Free State..	F. W. Reitz .....	President..... .	November 22, 1893.
Paraguay.....	Senhor Marimago . .	President..... .	June 11, 1894.
Persia.....	Nasir-ed-Din .....	Shah .....	September 10, 1848.
Peru .....	Andres A. Caceres ...	President..... .	August 10, 1894.
Portugal ... . .	Carlos I. . . . .	King..... . . . .	October 19, 1889.
Roumania.....	Charles. ....	King.. . . . .	March 26, 1881.
Russia.....	Nicholas II.....	Emperor..... .	November 1, 1894
Salvador .....	Gen. Gutierrez ... .	President..... .	August 7, 1894.
Samoa .....	Tamasesse .....	King.....	January 3, 1894.
Sarawak.....	Sir James Brooke .....	Raja .....	June 11, 1868.
Servia.....	Alexander I.....	King .....	March 6, 1889.
Siam .....	Chulalongkorn I....	King ....	October 1, 1868.
Spain .....	Alphonso XIII.....	King .....	May 17, 1886.
Sweden and Norway	Oscar II .....	King .....	September 18, 1872.
Switzerland ....	Joseph Zemp.....	President .....	December 15, 1894.
Transvaal (S. African Republic).....	S. J. Paul Kruger...	President.....	May 12, 1893.
Tunis .....	Sidi Ali Pasha.....	Bey .....	October 23, 1882.
Turkey .....	Abdul Hamid II....	Sultan .....	August 31, 1876.
United States.....	Grover Cleveland....	President.....	March 4, 1893.
Uruguay .....	Idiarte Borda .....	President... . .	March 1, 1894.
Venezuela .....	Joaquim Crespo ....	President..... .	March 14, 1894

**Physiography.** — In considering the higher study of geography by pupils of high schools, the Committee of Ten makes the following suggestion:

The special subject of geography should take on a more advanced form and should relate more specifically to the features of the earth's surface, the agencies that produce and destroy them, the environing conditions under which these act, and the physical influences by which man and all the creatures of the earth are so profoundly affected. This has usually been designated physical geography. There is an advanced and modernized phase of it, however, which the majority of the committee prefer to designate physiography, not because the name is important, but because it emphasizes a special and important phase of

the subject and of its treatment. The scientific investigations of the last decade have made very important additions to physiographic knowledge and methods of study. These are indeed so radical as to be properly regarded, perhaps, as revolutionary. Unfortunately they are not yet incorporated in text-books, in any large degree, nor are they, even in scientific treatises, collected into a form readily available for the use of the teacher. As yet they are widely scattered through various scientific publications. But this condition will doubtless be improved at an early date. Meanwhile, it is thought best that physical geography should be taught, by the aid of the best elementary text-books now available, as the best geographic course previous to the high school, and that there should be introduced into the high-school course either physiography, geology, or meteorology as the representative of the geographic line of studies, which may be broadly characterized as that which relates to the physical environment of man. Possibly more than one of these may be practicable in some high schools, when alternative or elective studies are offered.

A Minority Report by Professor Edwin J. Houston, dissenting from this, contains the following paragraph:

The Majority Report is characterized by a curious and persistent insistence as to the peculiar claims of physiography, which it styles advanced and modernized physical geography.

I radically disagree with the recommendations of the Majority Report in this respect. It is not that I object so much to the use of the term physiography, since I agree with the Conference that names are of little importance, provided their significance is fully understood. To my mind, however, the word physiography is vague and misleading. Its meaning, as indicated by its etymology, is a drawing of nature, and this is the sense in which Huxley employed it to cover the subject matter of a certain course of lectures, on natural phenomena in general, and on the basin of the Thames in particular. Unless it is specifically stated as to what the natural drawing is, no precise meaning is conveyed by the word.

The meaning of physiographic as an adjective is more definite; for example, physiographic geology. But even here authorities are at variance. . . .

Geikie defines physiographic geology as "That branch of geological inquiry which deals with the evolution of the existing contours of dry land," and this, it would appear, comes nearest to the meaning given to physiography by the Majority Report.

But it is primarily the study of geography, and not geology, that the Conference is considering, and, if a new term is needed, it would seem that physiographic geography would be indicated. The existence of the well-known term physical geography, in my opinion, renders the coining of the new word inadvisable.

Whatever the term employed, whether physiography or physiographic geography, it is evident that "an advanced and modernized phase" of physical geography offers an extended field for study, and that it will suggest many and various recreations which will prove highly profitable to teacher and pupils.



## CHAPTER V

### GYMNASTIC RECREATIONS

**A Defect in American Education.** — It is a crowning glory of the American people that vast sums are annually expended in every State and Territory of the Union to educate the minds of the children, and to prepare the rising generation for success in the various employments of life and for happiness in the home. It is a conspicuous defect of our educational system that we have taken so little thought for the physical development of the pupil, thus in a great measure undoing that upon which we have lavished so much expense and care. The young man or woman who is sent into the world with a cultivated mind—perhaps with a brilliant intellect—but with an undeveloped or debilitated body which will always hamper the free exercise of the mental powers, has fallen far short of the opportunity which an enlightened education should offer.

Generally it has been assumed that the pupil acquires enough incidental exercise in the course of a day to give sufficient bodily development; but there are few occupations and few amusements which exercise all the muscles adequately, and children, as a rule, especially the children of cities, have neither time nor opportunity for enlightened physical training outside the school. They have often expensive and elegant schoolhouses, but very limited playgrounds. It is an encouraging fact that many of the newer school buildings in our cities have commodious and well-appointed gymnasiums, under the charge of regular instruc-

tors in physical culture, who conduct daily or semi-weekly physical exercises by classes, and superintend the gymnastics of individual pupils.

In village and country schools the gymnasium is rarely found, though sometimes a vacant room in a school building is set apart for physical exercises, and is furnished with simple appliances suitable to the purpose. Perhaps it is not too optimistic for us to hope that, in the future, even the smaller schools of country districts will be generally supplied with a suitable room for physical training — either an apartment in the main school building or a building of simple construction upon the playground, with a considerable equipment of appliances for gymnastic training.

**A Duty of the Teacher.** — An intelligent care for the physical development of the pupils is a duty which the teacher cannot shirk. Even though, under the terms of his contract, he be not required to give any attention to the matter of calisthenics or gymnastics, and though he find neither a very suitable place in the school building or upon the grounds, nor any of the usual adjuncts of a hall for physical exercises, he cannot wholly escape the responsibility of giving some direction to the bodily activities of the pupils under his charge. Generally, by a little persuasion or effort, he can exert an influence favorable to the recognition of the pupils' physical needs, and can secure at least the beginnings of a simple gymnasium.

**Rooms for Gymnastic Exercises.** — A hall for physical exercises is especially desirable in the seasons of inclement weather, when pupils are compelled to remain indoors, and are apt to become wearied and stupefied by long confinement. Where no separate room for the purpose can be procured, and where the pupils are compelled to remain in the schoolroom during the periods of recess, the least the teacher can do is to provide orderly, interesting, and invigorating exercises within the schoolroom. Pupils should have an abundance of fresh air in the periods of exercises.

The windows and doors may be thrown open for a few moments, and the prisoners of a rainy day may derive from a hearty and well-managed physical exercise within the schoolroom almost the same pleasure which they would feel in the sports of the open air if the conditions were different.

Courses of physical training will vary in different schools, according to the circumstances. In many schools they form a part of the regular and systematic training of the pupils. In others, they are brought into use only upon special occasions, as on rainy days. In all schools, however, they should have a place, and every teacher should make the most of the opportunities presented in his school.

**Gymnastic Training.** — Gymnastic training should be systematic exercise, taken with a view to the regular and proper development of the various parts of the body. The tendency of most of the occupations of men is to develop only a part of the body, and to place it in a set and often unnatural position. The movements of a man who labors continually and without relaxation upon a farm are apt to become slow and awkward; for the work tends to develop the muscles of the back at the expense of those of the chest, and the body soon ceases to be erect. This tendency may be overcome by the more improved methods of modern farming, and by a proper variation of the work with suitable recreations.

Even the sports of children are not calculated to develop all the muscles of the body. In the exciting game of baseball there is more time spent in standing idle than in exercise; and when the exercise does come, it is short, sharp, and violent. Flying kites and playing marbles do not develop the muscles. Jumping, pole vaulting, and running are useful as forms of exercise, but they often lose the greater part of their value because the body is not gradually trained to them.

The games of children, however exciting their character or continuous the exercise which they supply, cannot take

the place of gymnastic, muscle-making work. They are devised for amusements as well as for exercises. They are played generally without any particular supervision, and the idea of muscular development by means of them is a secondary one. The proper time for instruction in simple gymnastics is in childhood, and the convenient and proper place for it is the school. Discipline of the muscles is necessary. It should be daily, though from fifteen to thirty minutes each day will be sufficient. Any teacher can direct the exercises and see that they are properly and regularly performed. If access to a gymnasium can be had, so much the better; if not, the work can progress very well without one. The appliances needed are few and simple. For six months of simple, bodily exercises, without apparatus, wands or dumb-bells may be used. The latter are so cheap that each child can provide his own, or the school may be divided into four or five classes, and enough dumb-bells can be purchased to supply a class at a cost of two or three dollars. In case a room in the school building can be set apart for a gymnasium, an ordinary carpenter can easily provide all the necessary adjuncts.

**The Purpose of School Gymnastics.** — The object of the exercises is to produce healthy pupils, not trained gymnasts. This fact should not be lost sight of for a moment in gymnastic work in the schools. As far as possible, the teacher should vary the exercises to suit the needs of all the pupils. The bodily development of the children will be found to vary widely, and the weaker muscles should be strengthened and built up in each particular case, until a fair average of physical excellence is reached. The teacher should study the functions of the different muscles and of the vital organs — how they may be trained, and what exercises are most appropriate for this purpose.

**The Teacher's Preparation for the Work.** — Some knowledge of physical education should constitute a part of the preparation of every teacher for his profession. A special

training for the work, under a competent instructor, may be made the employment of a single summer vacation. Various normal schools offer courses designed especially for teachers having this object in view, and combine theory and practice in physical training. There are, moreover, a number of valuable books upon the subject, which the teacher will find available for self-instruction.<sup>1</sup>

**Results of Physical Training.** — Strength, grace, beauty of person, and self-control are among the results that follow from a systematic course of physical training. The awkward feeling of childhood, the discomfort caused by rapid growth, the hands and feet that are always so much in evidence and so much in the way, the lack of reserve force, caused by unequal bodily growth or constant application to study, are gradually overcome; and ease of manner, bodily dignity, and quiet self-possession follow.

The first requirement of physical exercises for pupils is that they should be interesting, simple, and safe. The effect which each particular form of exercise has upon a different set of muscles should be explained, in order that the children may know the effect of each, and may be encouraged to practice for a few moments each day outside the schoolroom. A part of the exercises may be performed by the entire school. As for other parts, it is better to separate the boys and girls, for various reasons. The following are some simple suggestive exercises for schools which are not supplied with any of the gymnasium equipments.

**Simple Exercises without Apparatus.** — 1. *Correct Position.* — The first thing to be taught is the correct standing position. The body should be perfectly erect, the heels on the same

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<sup>1</sup> Among the most helpful of these are *A System of Physical Education* by Archibald MacLaren, published by the Clarendon Press (Oxford, Eng.); *How to get Strong* by William Blackie, published by Harper Bros.; *Physical Education* by R. Anna Morris, published by the American Book Company; and *School Gymnastics* by Dr. James H. Smart, also published by the American Book Company. Any of these books might be made the basis of a series of exercises to last through the school year.

line, the toes turned outward at an angle of about 60 degrees. The knees should be straight, but without stiffness; the body inclined slightly forward on the hips; the shoulders square and sloping equally, the arms hanging naturally at the sides, with the elbows close to the body. The head should be held erect, with the chin slightly drawn in. This position will cause the chest to be slightly thrown out, and the lower part of the trunk to be repressed. The teacher should point out the specific defects in the positions of the different children, showing how they occur and how they may be remedied. The position may be assumed by the command "position" or "attention." After critically reviewing the line of pupils and calling attention to defects in the position of individuals, the instructor may give the command "rest." At this command the pupil should move the right foot directly backward about three inches, resting the weight of the body on the right leg and crossing the hands in front of the center of the body.

The commands "position" and "rest" should be given alternately, until the pupils have no difficulty in assuming the desired position of the body at either command.

2. *Breathing Exercise.*—Let the pupils, while standing in "position," draw a long breath, at the same time throwing the shoulders farther back and throwing the chest forward, so as to fill every part of the lungs with air. Then let them force the air out slowly from the lungs, assisting the movement by slightly contracting the muscles of the shoulders.

The teacher should perform these exercises simultaneously with the pupils, all keeping proper time. The commands "one" and "two" may be given to indicate the inhalation and exhalation. This exercise should be repeated ten times at least, and then followed by a short rest.

3. *Bending the Head.*—After "position," let the pupils place their hands upon the hips at the command "hands on hips." Then the neck should be bent first forward, then

to the right, then to the left, and then backwards, each separate movement ending by bringing the head back to its original position. The command may be given thus: "Bend the head forward — one, two; back — one, two; to the right — one, two; to the left — one, two." The head being bent in an indicated direction at the command "one," recovers its original position at the command "two." The pupil should wait for a command before executing any exercise, and should keep the head in the position assumed until the command "two."

By insisting strictly that these commands be obeyed when given, and not until they are given, the teacher will afford a desirable discipline in the concentration of the pupils' attention upon the matter in hand. The entire series of these movements should be repeated three or four times before resting.

4. *Exercises of the Trunk.* — After the pupils are in position, their hands on their hips, the preceding exercise may be varied by the command "Bend the trunk forward — one two," etc. At the command "one," the pupil is to bend forward at the hips as far as possible; at the command "two," he is to resume the original position. The trunk then should be bent forward and to the right and left by the same commands, the pupil being careful to keep the knees straight, the heels and full feet on the floor.

This exercise may be unified by bending the trunk forward, to the right, backward, and to the left in one continuous motion. This should not be attempted, however, until the pupils can execute the separate movements perfectly.

5. *Movements of the Legs.* — (a) With the hands upon the hips at the command "Rise on toes — one," the pupil raises the body slowly upon the toes, keeping it otherwise in position as nearly as possible. At the command "two," he resumes the first position.

This exercise should be repeated four or five times at first; and after the pupils become accustomed to it, ten or more

times. No exercise should be repeated so frequently as to produce physical exhaustion.

(b) With the hands on the hips, at the command "Bend the knees — one," the pupil lowers the body four or five inches by bending the knees, having the feet squarely upon the floor, the heels together. At the command "two," he resumes the first position.

This exercise should be repeated four or five times to begin with, and more frequently later on.

(c) Standing in position, with the hands upon the hips, at the command "Extend the right leg forward — one," the pupil throws the weight of the body upon the left leg, extends the right leg forward about twelve inches, keeping the knees stiff and the toes bent downward. At the command "two," he replaces the right foot by the side of the left. The leg may be extended backward by a similar command, and the two exercises may be combined by commanding "Right foot forward and back — one, two, three," the original position being assumed with the count three. Regular commands should be given for the same exercises for the left leg.

(d) An excellent exercise for more advanced pupils is to stoop down on one foot, while the other is extended in the position described above. Many persons cannot do this at all, but by care and persistent effort it may be done finally by almost any pupil. It is especially useful in developing the muscles of the thigh. Either foot is to be extended as in the foregoing exercise, and turned upward as far as possible. The preparatory exercise may be repeated ten or more times. Then, with the hands placed on the hips and the feet six or eight inches apart, the body is lowered vertically six inches, and the erect position is resumed. This exercise should be practiced until the body can be lowered nearly to the floor.

(e) In a standing position, with the hands upon the hips, let the pupil leap a few inches into the air and come down



upon the toes with the feet about eighteen inches apart. The original position is to be resumed by a similar leap.

(f) Have the pupil rise upon the toes and bend the knees slightly at the same time; then resume the original position, again bending the knees in so doing.

(g) While in the position of "attention," the pupils are to raise the arms above the head, the palms of the hands to the front, the thumbs interlocked, the arms straight and stiffened at the elbow. They should bend forward now, keeping the feet in place and the hands straight, and touch the floor with the finger tips, if possible. This exercise may be performed by the following commands: "One" (bend over), "two" (resume erect position).

The exercise may be repeated four or five times before a rest is given. After a time, almost the entire hand may be placed upon the floor. Care should be taken that the knees be not bent; the bending of the body should be at the hips.

6. *Arm and Shoulder Exercises.* — (a) The pupil is to extend the arms in front of the center of the body, the palms of the hands joined and as high as the shoulders. He is then to throw the arms back forcibly, and to incline them slightly downward. The hands are to be joined at the command "one," and to be thrown back at the command "two." By repeating the counts "one, two," the exercise may be continued, ceasing at "three," when the position of "attention" is resumed.

(b) The pupil is to raise the arms, the palms of the hands upward, until they are in a line with the shoulders. He is then to describe a similar circle with the arms back of the shoulders at the count "one." This is to be repeated eight or ten times, ceasing with the count "two."

(c) The arms are to be raised so that the palms of the hands touch above the head, the arms being kept straight and the body erect. The arms are to be lowered now, perfectly straight to the sides, keeping them back of the shoulders. This exercise is to be repeated slowly four or five times.

(d) With the arms extended horizontally, palms of the hands upward and as high as the shoulders, the hands are to be opened and shut forcibly as if squeezing a rubber ball. This may be repeated twenty-five times. It is one of the very best methods of strengthening the grip.

(e) The pupils are to be formed around the sides of the room and about two feet from the wall, which they are to face. They now place their hands upon the wall, the body moving slowly forward until the chest touches the wall, the head being thrown back and the elbows kept close to the body. This movement may be repeated five or six times.

(f) When the desks are not more than two or three feet apart, the pupils standing by them may place their hands upon them, stepping back three feet. The pupils should lower their bodies between the arms until their chests are level with the desks, and then rise again by the arms. The exercise may be repeated two or three times.

7. *Exercises with the Dumb-bells.*—The best dumb-bells for ordinary use are those made of wood, weighing from one to two pounds. In many cases half-pound bells are better than the heavier ones. As the pupils increase in strength and age, the heavier bells may be used.

The advantages of dumb-bells are many. They may be suited exactly to the strength and development of the child, they exercise both sides of the body at once and equally, and they furnish work for nearly all the muscles. They are very cheap, a good pair of one-pound wooden dumb-bells not costing generally more than seven cents. Extended manuals of dumb-bell exercises can be procured easily. The following simple directions for such exercises may be easily extended by the teacher. The pupils will need little oral instruction in the use of dumb-bells, since such use may be acquired by following the teacher, who illustrates each movement by his own use of the dumb-bells.

(a) Take a dumb-bell in each hand, the hand being turned outwards and the finger nails being uppermost. Bend the

forearm, slowly raising it until the dumb-bells touch the shoulder. Now extend the entire arms horizontally from the shoulders.

(b) When the dumb-bells rest upon the shoulder, raise and extend the arms full length above the head.

(c) Let the arms hang naturally at the sides. Raise them by bending at the elbows until the dumb-bells are immediately under the armpits.

These three exercises may be combined, starting with the bells on the shoulder, by the commands, "Up, one, two; out, one, two; down, one, two." Repeat each movement three or four times.

(d) Hold the bells forward against the chest, the finger nails turned inward. Strike out quickly and strongly from the shoulder, first with one hand and then with the other, or with both hands at once, always completing one motion before the second is begun. In all movements exact time should be kept by the entire class.

(e) With the bell in the right hand, describe a circle with the right arm, throwing the arm as far back as possible. Do the same with the left arm, and separately. Repeat, with both arms at once.

(f) Hold the bells in the hands, the arms extended above the head, the feet about eighteen or twenty-five inches apart. At the command "down," bend over at the hips until the bells come between the feet. At the command "up," resume the first position. Repeat the commands four or five times, and see that the movements are executed together, and in time.

**The Bar Bell and its Use.** — An excellent form of dumb-bell is the bar bell, which consists of a light, strong bar of wood about three feet long, with iron knobs or weights at each end. The following are a few of the many uses of this instrument:

(a) The bar bell is placed on the floor directly in front of the pupil, who grasps it with both hands at points about

three inches from the weights, and raises it to a level with his chest, then lowers it slowly to its position on the floor.

(b) Raising it again against the chest, the pupil extends the arm slowly forward until the bar is directly over his head, then lowers it behind his shoulders and raises it again over his head, and finally lowers it slowly to the floor.

(c) The pupil grasps the bar bell with both hands near the center of the bar, and holds it horizontally with arms outstretched in front at right angles to the body. He then swings it to a perpendicular position, and returns it to its horizontal position; reversing the movement, he swings it again to a perpendicular position and again returns it to the horizontal. Subsequently, the bar may be swung in an even, steady motion by each hand separately.

**Walking, Running, and Jumping.** — In walking, two things are to be considered — position and gait. The body should be inclined slightly to the front. In walking we should spring lightly from the foot in the rear, transferring the weight of the body to the other foot. When the foot is advanced the length of a step, we should place it lightly on the ground — the heels first, the toes last; and as the toes strike the ground, we should raise the heel of the other foot, now relieved from the weight of the body.

The position in walking is independent of speed or length of step. The action at a rapid gait is more intense. The head should be thrown back, the chest expanded, and the breath should be full, easy, and regular. After correct position and motion in walking have been acquired, the distance and speed may be increased. In taking a long walk the speed should be moderate at the outset, but may be increased later. Walking parties in fine weather are excellent social and physical diversions.

The action and position in running are different from those in walking. Both feet are off the ground for a very short time, and each step is assisted by the momentum of the one before it. The position of the body is the same,

except that the toe strikes the ground first. The forearm should be horizontal and close to the body, the hands closed and the nails forward, the arms moving slightly with the motion of the body. Rapidity of step is essential in running short distances; length of stride in long distances; and endurance is necessary for both. The step should not be faster than 160 to the minute at the outset; and particular attention should be given to the breathing, which should always be through the nose. For a distance of half a mile, the steps at the outset should not be more than 150 to the minute. The toes should strike the ground first, and all movements of the body should be easy, the breathing being natural. When the half mile has been covered without fatigue, it may be increased to a mile. The rapidity of steps may be slowly increased then; but for long distances, as three or four miles, 160 steps to the minute will be found most satisfactory.

For all forms of jumping the ground should be soft. No better place than an area covered with soft, thick turf can be found, though the feet will often slip, even upon this. The ground may be prepared by digging it up to a depth of six or eight inches and leveling it carefully.

The simplest jump is made from a slanting position. The hands are raised above the head and then brought down fully extended. At the same time the knees are bent until they project over the toes. This movement should be repeated two or three times, and at the final depression there is a spring from the feet. By practicing the preliminary movements, all the parts of the body come to work in harmony, and the equilibrium is preserved in any position. In high jumps, the legs should be bent and brought as close to the body as possible at the moment of clearing the barrier. The barrier may be made by taking two pieces of wood, about two inches square and ten feet long, and fastening one end of each to a broad board, so that the poles will not be overturned easily. Holes should

be bored in the poles at about the height of three feet, and an inch apart. In these holes, long iron pins are to be placed, and a cord hung over them is kept taut by weights fastened to the ends.

**The Gymnasium and its Apparatus.**—What has been said previously in this chapter has referred to the general building up of the body, the development of the muscles, and to the acquirement of grace of motion and beauty of form. After a time the older pupils, especially the boys, will require a wider field for the exercise of these qualities which they have attained; they will desire to harden the muscles and to engage in more vigorous exercises. In other words, they will be ready for the gymnasium.

A great deal more of care and caution will be necessary at first in order to make the gymnasium work a success. If not rightly used, a gymnasium may be made a source of far more harm than good; and no pupil should be permitted to attempt advance work upon any of the appliances or machines, until he has shown himself to be expert in the simpler and more elementary exercises. Maclaren says: "The natural and suitable exercise strengthens; the excessive or undue exercise weakens and injures. I repeat, falls and broken bones are not the evils to be dreaded from these hazardous exercises. Falls can be seen, and broken bones can be mended. The thing to be feared is the strain from sudden, unregulated, or over-stimulated effort, an evil which at the time of its actual occurrence may never be known, or if known, concealed (for the young have a dread of such incapacitating injuries), but which, whether concealed or revealed, understood or misapprehended, felt late or soon, will surely appear, it may be to mar the hope and the happiness and the usefulness of all the life to come."

**A Simple Gymnasium.**—Supposing that the teacher has at his disposal a suitable room for gymnasium purposes, either within the school building or in a structure erected for the purpose upon the school grounds, he will find that

the cost of the necessary appliances need not be very considerable. All the furnishings mentioned below may be made easily by any one having access to a carpenter's bench and a set of tools — all with the exception of the iron rings, which any blacksmith can make. Following here are a number of exercises suitable for such a room, with suggestions to the teacher in charge:

**The Horizontal, or Vaulting Bar.** — This should be about eight feet long, and of a size to be grasped firmly by the hand. It should be made of well-seasoned hickory or ash. A very excellent form of bar is now made with a steel core, and this is sometimes covered with paper pulp instead of wood. The bar should be fixed between two firm supports, in such a way that it may be raised or lowered at will. It should be low enough to be grasped by the hands with arms extended.

**Vaulting the Bar in Three Movements.** — 1. Raise the hands and grasp the bar.

2. Raise the body to the full extension of the arms.

3. Place the right leg extended along the bar. Bring the left leg up to the right, clear the bar, and, letting go the hold with the hands, leap to the ground, facing the bar. In all similar exercises, be sure that the toes strike the ground first; in crossing the bar, the body should be parallel to it.

**Vaulting in Two Movements.** — 1. (The same as in the previous exercise.)

2. Swing the legs under the bar. On the return swing throw both legs over the bar and come to the ground as before.

**Vaulting in One Movement.** — Grasp the bar, and, using hands and feet at the same time, throw the feet over the bar, coming to the ground in the position before described.

The exercise may be varied to vault with one hand only, or to turn about the bar, keeping the body perpendicular to it, or to vault by the use of the hands alone.

Grasp the bar with both hands, as in the first exercise, except that the hands may be closer together; now raise the body slowly until the chin reaches the level of the bar, lower the body slowly; repeat the exercise four or five times. The exercise may then be varied by drawing the body up, with the feet extended horizontally. It should be continued until the pupil can raise himself twelve or fifteen times.

Raise the body until the chin is above the bar, as in the previous exercise. Then place the right forearm on the bar, following it with the left, so that half of the trunk is above the bar, the weight of the body being supported upon the forearms. Extend the arms and raise the body to the second position of the vault.

**To Encircle the Bar.** — Grasp the bar with the hands, the arms extended. Bring the feet up until they nearly touch the bar. Now, by bending the arms, pass the feet and body over the bar. The body should not touch the bar, but be near it during the exercise.

These exercises may be varied and continued indefinitely.

**The Ladder.** — This should be from sixteen to twenty inches wide; the sides about two by four inches, and rounded, so that they may be easily grasped by the hand. A convenient form is about twelve to eighteen feet long, fastened to supports so that it may be used in a horizontal position or inclined; if inclined, the lower end should be about seven feet from the floor, the upper end not more than twelve. A varied and useful set of exercises may be performed upon it.

**The Swing.** — Grasp alternate rounds of the ladder, the feet together, the toes pointing downwards; swing the lower part of the body slightly in the direction that you wish to go, and on the return swing let go of one of the rounds and grasp the alternate round ahead. Repeat the operation, traversing the whole length of the ladder. Standing under the ladder, grasp the sides with the hands, the feet ex-



tended, toes pointing downward, the head thrown back, and the chest out. Advance the right hand about the distance between the rounds, follow with the left, going the whole extent of the ladder.

Placing both hands on one side of the ladder, raise the body until the chin is the same height as the side of the ladder; advance the right hand as in the previous exercise, about the space between the rounds, the left hand following. These exercises may then be performed, keeping the legs parallel to the floor instead of extended.

The ladder may then be inclined and ascended backwards and forwards, the right hand leading and the left following; or by both hands at once, by making a slight spring, letting go of one round and grasping the one ahead. These exercises may be varied and continued in many different ways, always passing, however, from the simpler forms to the more complex.

**The Rings.** — Procure three or four pairs of iron rings, about five or six inches in diameter and made of iron three fourths of an inch thick. Cover them with soft leather, suspend them about five and a half feet from the floor and about twenty inches to two feet apart.

Raise the hands and grasp the rings, lowering the body until the arms are fully extended. Raise the legs slowly, keeping them stiff, with the toes to the front, lift the feet and pass them above the head, turning over in the rings and resuming the first position.

Grasp the rings as in the previous exercise; raise the body until the shoulders are as high as the hands. Lift the feet, keeping them together until they are parallel to the floor. Extend the right to its full length, and return it to the side. Repeat with the left.

From the first position of the previous exercise, raise the right forearm, pressing strongly upon a ring with the right hand, and raising the body above the ring. Do the same with the left hand. Now, keeping the arms rigid, bend for-

ward in the rings, turn over to the position under the rings, or turn the body forward, keeping the arms close to the sides, the elbows bent, until the body is perpendicular to the floor.

These rings may be attached to hooks so that their position can be changed. They may be placed about three to five feet apart, forming swinging or traveling rings, or a set of each may be obtained.

Grasp the first of these rings and swing the body backward and forward until the second is caught, then swing the feet once or twice to keep the momentum, and let go of one of the rings, grasping the next one with the hand thus freed.

**The Horse.**—One of the most useful appliances in the gymnasium, both for the number and variety of the exercises that may be performed upon it, is the horse. One may be made by taking a poplar or cottonwood log about eighteen inches in diameter, and leaving one side flat to insert the legs. Round off carefully all of the other part of the log. Pad it (old carpet will answer), and cover with leather. Bore holes in the flat side and insert stout legs. These should be fastened together by cross pieces, to prevent their springing. The horse should be about four feet high.

Stand facing the horse; place the hands on the back, fingers extended and palms down.

1. Make a slight spring, and raise the body, supported by the hands, until the arms are extended, the legs together.

2. Throw the right leg over the horse, the hands resting on the thighs.

Combine these exercises into one by facing the croup of the horse, the left hand on the saddle. Spring from the floor, supporting the weight of the body on the left hand; turn the body to the left, throw the right leg over the horse, and take the seated position in the saddle.

**Vaulting with the Horse.**—1. Take a run of twenty or thirty feet, quickening the pace as the horse is approached,

Place both hands on the back of the horse and swing to the saddle resting upon the horse.

2. Spring from the back of the horse, lighting on the feet.

Vary the exercises by leaping upon the horse with the feet; stand erect, and leap from the horse.

With the same running start as before place the hands upon the back of the horse, bring the thighs and calves of the legs close together and pass them between the hands.

Take a position twenty or thirty feet from the croup of the horse. Advance, running as before; place the hands on the croup, and vault over the croup into the saddle. On taking a longer run leap forward, the hands extended, striking the horse on the right and left, vault entirely over it lengthwise, no part of the body except the hands touching the horse. In all of the exercises in vaulting, the instructor and attendant should stand ready to catch any one who may fall.

A gymnasium should have four or five heavy mattresses, to be placed near the different pieces of apparatus where there is a possible danger from falls.

**The Parallel Bars.** — There are two forms of this apparatus, the most useful machine in the gymnasium, that may be easily made.

Mortise in the floor four posts, about three feet six inches high, about twenty inches apart one way, and six feet the other. Fasten the uprights securely to the floor by braces; upon the top of the supports mortise bars about ten feet long, four inches wide, and two inches thick. Round the upper surface of these bars to fit the hand.

The other form is made by taking two horizontal bars, fastening them to parallel supports about thirty inches apart. The bars should be so arranged as to be raised and lowered at will.

Stand at one end of and between the bars, raise the hands and place them upon the bars, thumbs inside, fingers extended and pointing down.

Raise the body until the arms are fully extended, the head erect, chest thrown out, legs together, the toes pointing to the ground. Advance the right hand about six inches along the bar, follow with the left. Repeat until the length of the bar is traversed.

Go through the same exercise, facing the other way.

Assume the same position on the bar as before, except that the legs are bent backward at the knee until they are parallel to the floor. Then make a slight spring, moving forward about six inches with both hands at once, until the bar is traversed.

Perform the same exercise, facing the opposite way.

Take the position above and between the bars, the arms extended. Lower the body by bending the arms at the elbow; raise it slowly by extending the arms. Repeat two or three times.

From the first position of the previous exercise, raise the legs to the front, pass them to the right, and clear the bar.

From the first position swing the feet backwards and forwards between the bars. At the second or third swing, throw the feet over the bar, and come to the ground. This may be done on either the backward or the forward swing.

Perform the same exercise, but, after the feet have cleared the bars, turn the body completely around, facing the opposite direction.

Being above and between the bars, the arms extended and legs together, swing the lower part of the body two or three times, until the legs rise above the bar at both backward and forward swings. At the completion of the backward swing, lower the body by bending the elbows; raise it again at the completion of the forward exercise. This exercise should not be attempted until the simpler exercises are mastered.

A great variety of combinations of exercises may be formed from those given above, and any gymnasium manual will furnish a large number.

**Other Gymnasium Apparatus.**—Among the other pieces of apparatus that are easily prepared are the climbing pole and rope, the vertical parallels, the knotted rope, the rowing machine, and various other lifting devices. As a source of amusement as well as exercise, the striking bag has many advantages. It should be about eighteen inches in diameter, of canvas or leather, and filled with hair, excelsior, or sawdust. For ordinary use, hair is perhaps the best filling. Suspend by a rope from the ceiling. In hitting it, strike squarely before the shoulder, the force of the blows increasing gradually.

**Care in Gymnastic Exercises.**—The successful management of classes in the gymnasium is a matter that requires much study and care. In the first place, there must not be too much reserve or stiffness; for if children are to take pleasure in the exercises and be benefited by them, these must be natural and interesting. The lack of discipline is as dangerous as too much of it. It means a waste of time and energy, and much useless disorder. Unless the time at command be very short, I should divide it into two periods, leaving about five or ten minutes at the end for exercises at will. In general exercises, five minutes will be sufficient between rests unless the pupils are used to the work. Four or five different exercises should be done during the five minutes, selecting those that will exercise different parts of the body. Five minutes of exercise with the dumb-bells, and five without the bells, with a rest of one to two minutes between, is a good arrangement.

**General Observations.**—Be sure that all of the children are in a correct position, that all of them go through the exercises correctly and in time. Give the command to begin and close the different exercises that are done by counts, the pupils counting to themselves or aloud. The latter plan is the better until all have the proper cadence. Walk about through the class, noting defects in position or in the performance of the various exercises, correcting those

who are out of time, and frequently counting aloud to keep up the cadence.

There are few prettier sights than a class of fifty or sixty pupils engaged in a somewhat complicated dumb-bell drill; the arms moving together and in time, the bodies in correct position, the faces bright with the gleam of health and interest.

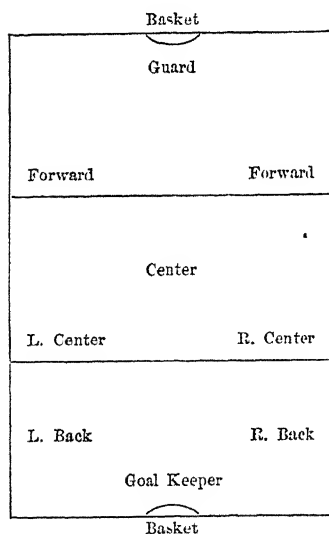
Never allow slovenly work in any of the exercises. Correct and correct again, until the performance is exactly as it should be. A few movements should be thoroughly explained and the pupils drilled upon them until they are perfect. At the beginning of each day's lessons, review the exercises of the previous days and add one or two new movements until the set or series is mastered. The exercises must be full of snap, fire, and action. Avoid all listlessness and carelessness, as they will surely destroy the interest in the work.

After ten minutes of these general exercises, divide the pupils into squads of not more than ten, each squad under a leader who is selected for his quickness to learn and ability to perform the various exercises, as well as for the power of keeping order. The exercises for a given day, two or three in number for the different machines, should be selected beforehand, and the squad leaders should be familiar with them.

It is best to have two or more sets of rings and two horizontal bars. The members of squads can follow each other rapidly on the horse, the pair of rings, or the ladders. The squads at the rings and the horizontal bar should not be more than half as large as those at the horse, ladder, and parallel bars. Have the leaders stand near the machines, ready to catch any one who may fall, or assist and direct any one who does not understand the exercise. At a given signal from the instructor (a bicycle whistle is a good thing for signals) let the squad leaders perform the given exercise upon their respective machines, followed in rapid succession

by the members of the squads, repeating an exercise when necessary to acquire the full meaning and effect of it. As soon as the members of the different squads have performed the exercises (at the sound of the whistle), have the squads change from one piece of apparatus to another, in regular order, until each member of each squad has performed one or two exercises upon the different machines. It is a good plan to take the squad leaders alone for a few minutes, before the lesson, so that they may become familiar with the exercises, the positions of the body, and the order in which the squads are to run. When not exercising, the members or the squads are to stand quietly in line, in correct position, and give their attention to the exercise being done by the members of their own squad.

**Games for the Gymnasium.** — Some very interesting games can be played in the gymnasium. In bad weather they



may be made to take the place of outdoor sports. The rules for the games are necessary and should be carefully observed, as they are made with an idea of avoiding and eliminating all dangerous features.

**Basket Ball.** — This game may be played by from five to nine men, dispersed as in the figure, with an equal number of opponents. The object is to throw the ball into the opponents' basket. The positions are not fixed, but should be nearly as indicated in the figure, to prevent

bunching the team. The ball is tossed from one player to another towards the opponents' basket. The object

of the players should be to place themselves in such a position that a decided advantage is gained every time the ball is passed. The ball is placed in play by the referees or umpire, by being thrown up in the middle of the field. The hands only are used to bat the ball or hold it. Kicking, tripping, bucking, shouldering, and similar forms of interference are not allowed. The ball must not be touched or hit with the fists; the ball may be taken away from a player provided *only* the ball is handled.

The games are generally played in halves of twenty minutes each, and points won decide the game. A goal counts three points; a foul, one for the opponents.

For the purpose of practice and amusement, as many players may be chosen on each side as the space at hand will accommodate. They are disposed at the discretion of the captain, but according to the rules given above. The ball should be a small-sized round football.<sup>1</sup>

**Tag.**— Another game is hang tag. The one designated as tag endeavors to touch one of the other boys. If too closely pursued, they may hang upon any of their pieces of apparatus at hand. They should be allowed to touch the apparatus with the hands only. After a good deal of running the tag may station himself near a boy and tire him out. Then the others should try to attract his attention. It very often happens that those boys who most need the exercise will station themselves near a convenient support and remain there. Stop such practices, if possible, so that everybody may have a share of the exercise and work. Separate the boys into pairs. Have them hop about on one foot, striking each other with the shoulders until one of them is forced to put both feet on the ground.

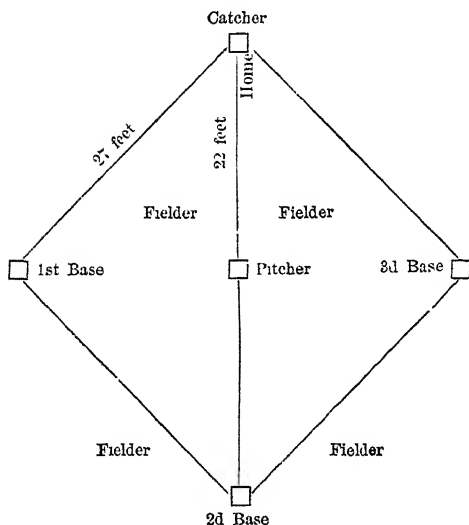
In the same position have each boy try to put his toe under the other's foot, thus destroying his equilibrium, and forcing him to put his other foot on the floor. In these

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<sup>1</sup> Complete rules for the game are published by the Triangle Publishing Company, Springfield, Massachusetts.



exercises the hands should be held clasped behind the back. Arrange the boys in line, facing each other, and on opposite sides of the room; have one boy midway between the two lines. Let the boys run from one line to the other, the boy in the center trying to catch those who are running. When any one is caught, he takes his place in the center. The fun is very exciting when the boys in the center are nearly equal in number, and otherwise pretty evenly matched.



**Indoor Baseball.** — The ball to be used in this game is of a compact substance, seventeen inches in circumference, and weight eight and one fourth ounces. The bat is two and three fourths feet long and one and one fourth inches in diameter at the largest part. The bases are one and one half feet square, are filled with sand and placed loosely upon the marked spot. The rules of the game are similar to baseball.<sup>1</sup>

<sup>1</sup> The rules are published by the American Sports Pub. Co., New York.

**Hang Ball.** — This game may be played with a small-sized football. The players are dispersed as in a game of baseball. The ball is hit by the batter hanging by his hands from a horizontal bar, and striking the ball with the bottoms of the feet only; or with any part of the feet provided they are kept together, and the motion of the body is a straight swing under the bar. A *foul* is a ball that has been hit and strikes behind the line of the bar prolonged.

The other rules are the same as for baseball.

**General Observations.** — Many other games will be suggested by the size and shape of the room, the apparatus in it, and the time and opportunities for playing.

During the exercises, allow no laughing or talking. If these things are once permitted, they will soon become an intolerable annoyance. Keep the work moving, and moving briskly. After ten or fifteen minutes of sharp work, march the squads together, and break ranks, allowing five minutes for exercise at will.

The pupils should be allowed to perform any exercise not dangerous and overtaxing in its character, and a considerable allowance should be made for noise. In other words, let the pupils within reasonable bounds do as they please.

If these exercises are kept up regularly, the time that is given to machine work may be gradually lengthened toward the end of the year as soon as different exercises are learned and the body becomes stronger.

A system of measurements should be kept, for the satisfaction of the instructor, if for no other reason. This should include age, height, weight, forearm, upper arm, chest contracted, normal, and expanded, and waist, to which may be added the measurement of the thigh and calf. At the close of the term or year, take the measurement and note the increase. In many cases the results will be almost incredible.

By perseverance in such a course of work, by showing where the danger lies in overdoing any part of it, how the inestimable benefits of health, grace, and beauty follow from a short period of daily exercise, by building up the body and making it a proper receptacle for the mind, not only will the class upon whom the work is exerted be benefited, but the results will descend with unceasing force and value from one generation to another in the form of healthy, well-proportioned children, approaching more and more nearly to the ideal of physical perfection.

**The Rulers of Spain.** — While Spain is now “lost in the world’s debate,” its rulers in old time were among the great directors of the destinies of Europe, and it may be worth the pupil’s while to learn the course of the Spanish succession in the following rhymes :

**United Houses of Aragon and Castile**

The first great sovereigns of this land  
Were Isabella and Ferdinand,<sup>1</sup>

**House of Hapsburg**

Then Charles the First<sup>2</sup> (in another see  
He was known as Emperor); Philips three ;<sup>3</sup>  
Charles the Second completed his line,

**House of Bourbon**

And Philip of France began to shine.  
Next Ferdinand Six, Charleses Three and Four,  
And

**French Invasion’**

Joseph Bonaparte comes to power.

**House of Bourbon Restored**

Then Ferdinand Seven in the purple is seen,  
And is ruled by his consort, Marie Christine,  
Who follows as regent, and contends .  
Against Don Carlos and his friends,  
Till the girl queen Isabella is grown,  
And reaches the age to rule alone.

**House of Savoy**

Amade’us, of Italy, comes to reign,  
But proves a failure and sails from Spain.  
Then comes the republic of Castelar’,

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<sup>1</sup> Ferdinand V.

<sup>2</sup> The Emperor Charles V.

<sup>3</sup> Philips II, III, and IV.

## House of Bourbon Restored.

Alfonso Twelve then wears the star.  
 The girl queen Mercedes now is seen  
 For a few short months, which intervene —  
 Until the birth of Alfonso Thirteen,  
 Who was never a prince, but from his birth  
 Was reckoned among the kings of the earth.  
 His mother, Christina, the power retains,  
 While over his kingdom the boy king reigns,  
 Lord and Master of all the Spains.

**Mythical History of England.**—If we except the brief mentions of Britain derived from Roman writers, histories of England, as a rule, extend back no farther than to King Arthur, a partly historical, partly legendary British character of the period of the Saxon invasion, about the middle of the fifth century. The story of ancient Britain preceding his reign is told, however, from a period almost as remote as that of the Trojan war. It is related that Brutus, Brute, or Brut, a great-grandson of Æneas (the hero of Vergil's *Æneid*), conducted a band of Trojans to Britain, and founded the city of London, exterminating a race of aboriginal giants in the island. One of his companions, Corin'ëus is supposed to be the original Jack the Giant-killer of nursery legend. In Book II, Canto X, of Spenser's *Faerie Queene*<sup>1</sup> is given an account of all the reigns of British sovereigns from Brutus to Uther, the father of King Arthur. This account is well worth perusal, not only for an acquaintance with the style of Spenser, but because of its relation to semi-historical and legendary characters which appear in various forms of literature. Among these are especially to be noted the following:

Debon, whose name is given to Devonshire.

Corin'ëus, who gave his name to Cornwall.

Canute (not to be confounded with the later Danish king of the same name), who gave his name to Kent.

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<sup>1</sup> This canto is contained in Skinner's *Readings in Folk-lore*.

Albanact, from whom the name Albany is derived.

Camber, from whom the name Cambria originated.

Humber, from whom the Humber River takes its name.

Sabrina, from whom the Severn River (Latin *Sabrina*) was named.

(These etymologies must not be accepted as well established. They indicate only the manner in which the origin of the names was accounted for in popular legends.)

Leir, the King Lear of Shakespeare's drama.

Ferrex and Porrex, who were the subjects of the first tragedy in English (which bears their names as its title), by Thomas Sackville.

Lud, who gave his name to Ludgate, in London.

Kimbeline, the Cymbeline of Shakespeare's play. In his reign the Saviour was born. Kimbeline is supposed to have given his name to the Campbells of Scotland.

Coel, the "Old King Cole" of the nursery rhyme. He is said to have been the father of the empress Helena (St. Helena), mother of Constantine, the first Christian emperor of Rome.

Bunduca, or Bonduca, the Boadiceæ of history and of poetry, who heroically strove to defend her land against the Romans.

Vortigere, the Vortigern of history.

The reading of the canto mentioned will prove a most interesting and profitable recreation for a class in English history. The narrative is so doubtful in many parts that historians reject it as without authority, yet it certainly throws some light on a dark subject, and doubtless contains much of truth in relation to early Britain. The reading of Spenserian stanzas is a desirable exercise in itself. The stanza employed in the *Faerie Queene* has been used as a model by many poets succeeding Spenser. The last line, an alexandrine (of six feet) adds much to the beauty of its recital.

**Pre-Columbian Discoverers of America.**—In one of Dr. Emerton's historical theses at Harvard University were dis-

cussed systematically the claims of various nationalities to the honor of having discovered America, and a complete bibliography upon the subject was prepared.<sup>1</sup> Only the claims which rest upon historical documents were considered, yet these related to nine separate discoveries, claimed by various nationalities. The most of these are involved in obscurity and doubt, yet each presents an interesting field for investigation and study. The claims put forth for the different discoveries are as follows:

1. That a Chinese Buddhist priest, in A.D. 499, sailed eastward to the western coast of America, which he named Fusang. The claim rests upon the narrative of a Chinese chronicle by one Ho'li Shin, and various circumstances seem to favor its probability.

2. That a Norse viking, Leif Er'ikson, in the year 1000, visited the coasts of Newfoundland, Massachusetts, and Rhode Island. This is now generally accepted, and there are in the United States various statues in honor of the Norse discoverer. The Norse name for the coast which the vikings settled was Vinland. Circumstantial accounts of the vikings in America are found in various sagas of the North.

3. That eight Arabs of one family (the Maghrou'ins), about the year 1125, sailed through the straits of Gibraltar and reached the coast of America. The authority is an Arabic manuscript, centuries old. The opinion is generally held that this discovery concerned some islands in the Atlantic, and not the American continent.

4. That Mad'oc, a Welsh prince, conducted two voyages to the coast of North America in 1170, and left here a number of colonists. To this alleged discovery there are various allusions by old Welsh bards. The subject forms the theme of Southey's poem of *Madoc*. The tendency of later criticism is to throw discredit upon the story, but there is much

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<sup>1</sup> This syllabus is contained in Anderson's *America Not Discovered by Columbus*.

controversy concerning it, both in Great Britain and in the United States.

5. That two Venetians, Nicolo and Antonio Zeno (*dzay'-no*), in 1380, discovered the American continent, which they named Estotiland. The claim is based upon alleged letters of the Zeni, which were published by their descendants in Venice in 1558. The comments of several European investigators of this claim are favorable, while those of American authors and students are not, as a rule.

6. That the Portuguese navigator, Cortereal (*cor-ta-ra-awl'*), discovered Newfoundland in 1463. This claim is not generally accepted.

7. That a Polish pilot, Jehan Scol'vus, Kol'nus, or Scol'nus, in the year 1476, sailed to Labrador. The opinions expressed by critics in reference to this alleged discovery are generally favorable.

8. That Martin Behaim (*ba'-hime*), a German, of Nuremberg, in 1488, discovered South America. The account of this alleged discovery, in the chronicles of Schedel (*sha'-del*), appears to be an interpolation, in a different handwriting; and though Behaim's globe represents an American coast, it is held by some that he drew it from conjecture and not from knowledge. This claim is by many considered unfavorably.

9. That Cousin (*coo-san'*) of Dieppe, France, in 1488, discovered the mouth of the Amazon, which he named the Maragnon. Opinion is divided as to the truth of the claim.

In the foregoing, there is no mention of Brendan, Brandan, or Borandan, the Irish monk who, as is claimed, discovered America in the sixth century; for there are no historical documents, but only legends, concerning this navigator.

It is a matter of sentimental interest to the various nationalities concerned that they contributed something to the impression in the minds of many, in the days preceding Columbus, that land had been known west of the Atlantic. This impression, a vague and unsatisfactory one, was widely



diffused, and doubtless influenced Columbus in favor of his great project. In a nation made up like ours, from all the elements of European population, all these claims are of interest, and can be entertained without prejudice.

**The Iconoclasts.**—The iconoclasts of old, as the etymology of their name indicates, were the destroyers of sacred images. The term by which they were designated is now applied to those historical critics who have demonstrated the mythical character of much that was received in a former day as historical. It is not always agreeable for people to give up their beliefs long cherished; and the results of later historical criticism have not been always welcome. The iconoclasts have relentlessly torn from the pages of history very much that was a source of delight to readers of former times; and as the work continues, the question is often asked, How much of history shall be left after they have gone through it all? It is possible that a future age will be more inclined to belief than is the one in which we live, and that the judgment of the iconoclasts will be reversed in respect of many things.

**History and Folk-lore.**—It must be remembered, however, that the narratives which are excluded by rigid criticism from the pages of history are by no means lost, but are added to the pages of folk-lore, which is now a study of great and growing interest. The folk-lore of ancient Rome is more interesting than its veritable history, and to the general public it is much more important, in view of its relation to literature and art. Still, the line of distinction between history and folk-lore should be carefully maintained.

"The illusions of history," says Hubert M. Skinner, "are almost infinite in number, and illusory etymologies are very apt to lead the unwary scholar astray. The critical student of history will be amazed at the number of errors which are shown to have crept into almost every historical work of the past; and he will appreciate the

magnitude of the task presented to one who would undertake now to write a history—to sift out and eliminate from his facts all error, leaving only the exact truth, in accordance with the rigid requirements of modern historical criticism. From all this labor, perplexity, and conscientious care the student of folk-lore, who loves folk-lore for its own sake, is free. It matters not at all whether the head of Horace Greeley did or did not shoot up through the top of Hank Monk's coach; whether Peter Cartwright really did or did not blaze his way with a hatchet through the labyrinth of corridors in a New York hotel; whether Zachary Taylor, imperturbable in the midst of the hottest fire, did or did not drawl out, 'A li-t-t-l-e more grape, Captain Bragg.' In either case, the story is equally good. If it be characteristic of the person to whom it is applied, it will answer every purpose of folk-lore."

"But does any sensible man regret," says Dr. William Mathews<sup>1</sup>—"or any sensible woman, in this age of Somervilles, Stowes, and Martineaus—that he is no longer cheated by the fictions that amused his childhood?—that he has ceased to believe that Romulus and Remus were suckled by a wolf, and that Jack the Giant-killer, Sinbad the Sailor, and Robinson Crusoe, were flesh-and-blood personages? If not, why should he mourn because some relentless investigator threatens to sweep away the myths that have deceived his maturer judgment by suggesting grave doubts whether Curtius did actually jump into the gulf, or whether there was any gulf for him to leap into; whether Portia swallowed live coals; whether Xerxes cut a canal through Mount Athos, and clouded the sun with the arrows of his soldiers, etc. . . . Let us cultivate a reverent love for Truth;—pure Truth, without gloss, alloy, or adulteration. Let us seek to know 'the truth, the *whole* truth, and NOTHING BUT THE TRUTH,' in history, in science, in

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<sup>1</sup>From Mathews' *Hours with Men and Books*.

literature, and in religion, at whatever sacrifice of our prejudices, or whatever havoc it may make with our fondly cherished illusions; for, if there is any truth which all the experience of the past thunders in our ears, it is that falsehood is moral poison—that any short-lived pleasure which we may derive from cheating ourselves or from being cheated, will be dearly paid for by the disappointment and anguish which will be ours when the veil shall be torn away, and we shall see things as they are.”

**Work of the Iconoclasts in American History.**—The iconoclasts have busied themselves with Columbus. Not only is it now believed that he was not the first discoverer of America, but it has been shown that his remains do not rest in the Cathedral at Havana (as was believed until recently), and most investigators are now satisfied that his first landing place was Watling Island, and not Guanahani, or Cat Island. A monument has been erected recently on Watling Island in commemoration of the discovery. The name which Columbus gave to this island was transferred to Guanahani, in the belief that the latter was the first landing place of the great admiral.

The familiar anecdote which is related of the boy George Washington, the hatchet, and the cherry tree, while dear to every American child, and valuable to every parent and teacher as affording a moral lesson to the little ones in their care, is regarded by critics as purely an invention, though it has never been disproved.

The story of the rescue of Captain John Smith, by the Indian “princess” Pocahontas, from death by the executioners of King Powhatan—which lends romance to the early history of Virginia—is by many accounted a myth. It rests solely upon the statement (made for the first time many years after the alleged occurrence) of the famous captain, who is accused of unblushing and habitual mendacity, and who made use of the tale for advertising purposes. Even if it has a foundation of fact, the terms employed in

the narration, as long received, conveyed an absurdly wrong impression. Pocahontas was not a princess, but a miserable savage child—though she became civilized and refined to a certain extent through her later association with the English, and through her marriage to Rolfe. Her introduction to society in England was another part of Smith's advertising scheme.

The story that the horse of General Stark sank beneath its rider, being killed at the battle of Bennington, is without foundation of fact, though it is repeated by various historians. It is true that Stark *lost* his horse in the confusion of the skirmish, and afterwards advertised it as stolen.

The reply of Charles C. Pinckney to the French Commissioners—"Not one cent for tribute—millions for defense," is not historical. The cent was not coined in that day. Mr. Pinckney's reply really was "Not a penny—not a penny."

It has been a thousand times repeated to the discredit of the British soldiery in Louisiana in the time of the war of 1812, that the password before the battle of New Orleans was "Beauty and Booty." The matter was thoroughly investigated, however, and every British officer who survived the battle declared that there was not a word of truth in it.

Early in the present century some careless writer, in speaking of the battle of Tippecanoe, stated that General Harrison was dispatched with an army against Tecumseh, whom he defeated, the result of the battle being a lasting peace between the whites and the Indians. This account has been repeated or paraphrased by various writers.

The facts are, that Harrison was not a general at that time, but the governor of Indiana Territory; that he marched to the northern part of Indiana with a following of militia, in a purely defensive campaign; that Tecumseh was hundreds of miles away, and had left orders that the Indians should not fight; that the Indians made a sudden attack upon the governor's camp, but were soon repulsed, Harrison's loss

being sixty-two killed or mortally wounded; that so far from putting an end to the hostilities or leading to any treaty of peace, the battle of Tippecanoe, as it is called, was the beginning of about three years of terror on the frontier, and of a long series of engagements between the white settlers and the Indians. Following upon this battle were the siege of Fort Wayne, the massacre of Fort Dearborn, the Pigeonroost massacre, etc. Almost every settlement in Indiana remained in a state of alarm, the men being banded together for defense, and the houses being built, generally, with a view to resisting attacks, and supplied with loopholes through which the inmates might shoot. The title of "Hero of Tippecanoe" was applied to Harrison in derision, many years later, when he was a candidate for the presidency, and after the skirmish at Tippecanoe had been eclipsed by his greater achievement on the Thames. However, like the other epithets used in the campaign—such as "The Log Cabin Candidate," "The Coon-hunting Candidate," "The Hard Cider Candidate," etc.—the title of "Hero of Tippecanoe" was adopted and proudly used by the followers of Harrison; and in view of the bravery and good management which the young governor exhibited throughout the severe skirmish at Tippecanoe, it was not unmerited.

All the old pictures of the battle of New Orleans represent the American defenses as made up principally of cotton bales. General Jackson, however, always denied that these were used. The breastworks of the Americans were made of earth, and the story originated from the fact that a few bundles of manufactured cotton goods were thrown into one of the mud walls, which was a matter of very little import, contributing little or nothing to the success of the battle.

Among the anecdotes of the Mexican war none is better known than the alleged order of General Zachary Taylor to a subordinate officer, "A l-i-t-t-l-e more grape, Captain Bragg." Captain Bragg, however, always asserted that no such order was received by him.

Many commonly received stories of the war of the Secession have been found lacking in authenticity. Whittier's poem of *Barbara Frietchie* relates an incident which never occurred, although an old dame having the name of his heroine lived in Frederick, Maryland, at the time when "Stonewall" Jackson's army marched through the town.

Poetry and song have represented the brave Admiral Farragut as having lashed himself to the mizzenmast above the smoke of battle, in the engagement in Mobile Bay, in order that he might signal his men from a position so advantageous and so perilous. As a matter of fact, however, Farragut was not lashed to the mast, but for a few moments stepped up into what is called the main rigging.

There is a general impression that Daniel Webster voted for the Fugitive Slave Law, and this is stated as a fact in more than one historical publication. In fact, however, Webster was not a member of the Senate at the time when the bill passed, but was serving as Secretary of State.

Popular belief credits Henry Clay with the authorship of the Missouri compromise of 1820, by which slavery was restricted from the federal territory lying north of latitude 36° 30', exclusive of the State of Missouri.

The author of this restriction was Jesse B. Thomas, of Illinois. While Clay voted for this compromise, he was not active in securing its adoption. This compromise secured the passage of an "enabling act" authorizing the people of Missouri to form a Constitution (permitting slavery). However, when that document was prepared, it was found to contain an obnoxious provision excluding free negroes from the State; and even though this should be stricken out in order to secure the final admission of the State, it was feared that the Missourians would again insert it in the Constitution later on, after their State should have been admitted.

An additional compromise was found necessary in 1821, and *this* was the work of Henry Clay. The objectionable

provision in reference to free negroes was stricken from the Constitution, and a "solemn public act" was passed, by which the new State gave pledge that the provision should never be enacted. And thus the admission of the State of Missouri was the result of two successive compromises, with the last of which Henry Clay is properly accredited.<sup>1</sup>

The deprecatory question, "Who is James K. Polk?" has become historical. At the time of his nomination it was claimed by his opponents that he was a man utterly unknown to the people; and numerous writers in later days have been misled by this taunting inquiry into speaking of him as an "obscure man."

The fact, however, is, that Mr. Polk had not only been elected governor of Tennessee in a campaign conspicuous in its interest; had not only been an active member of Congress for many years, but had served twice as Speaker of the House of Representatives—thus occupying the most influential position in the Federal Government after the presidency itself. The terms of his Speakership were very notable ones, and in a number of instances he was rendered peculiarly conspicuous as the presiding officer of the House. Whatever may have been the measure of his abilities, he certainly was not an "obscure man" as candidate for the presidency.

It is very generally believed that Chief Justice Taney, in his decision on the Dred Scott case in 1857, declared that a slaveholder was privileged to conduct his slaves into any Territory or State without forfeiting his ownership of them.

Chief Justice Taney made no such direct decision in reference to States.<sup>2</sup> He held that slavery might be maintained in the Territories, since the latter were the common property of all the States. Accordingly, he held, the fact

<sup>1</sup> This is fully explained in James G. Blaine's *Twenty Years of Congress*, and elsewhere.

<sup>2</sup> The reader will find a very clear exposition of this famous decision in addresses by Abraham Lincoln in the Lincoln-Douglas debate of 1858.

of Scott's master's having taken him to Fort Snelling (in a free Territory) did not operate to free the slave. As to the fact of Scott's having been taken to the free State of Illinois, the Supreme Court left it as a matter for the State courts (Missouri courts in this instance) to decide what effect such an act would have upon the status of the slave. In this connection, it may be added, many persons believe Chief Justice Taney to have decided that a negro had no rights which the white man was bound to respect. No such decision was made, although a statement similar to this was made by the chief justice as illustrative of opinions existing in a former age.

It would seem that there is nothing more purely American than the old song of *Yankee Doodle*; yet both song and words (except that *Yunkee* has been substituted for "Nankee") date back to the time of the English commonwealth.

*Dixie's Land* is a synonym for the South, especially the old South at the time of slavery; yet it has been shown that the original "Dixie's Land" (or Dix's Land) was an old estate in New York.

**Work of the Iconoclasts in General History.** — Iconoclasts have been doing work in English history. As previously stated, nearly all the accounts relating to England previous to the Saxon invasion (with the exception of a few records which we have derived from Latin authors, and relating to the Romans in Britain) have been rejected for centuries as unhistorical. Within recent times, some of the fondly cherished beliefs of the English concerning their earlier history have been overturned. One of these was the belief that the Parliament of England dated back to the time of Egbert, and that in the reign of this monarch the name of the country was changed from *Britain* to *England*. Both the Parliament and the name were of later origin.

Many unimportant but generally accepted anecdotes of noted Englishmen are shown to be untrue, as a few examples will illustrate.



The story that Milton, composing his *Paradise Lost* while blind, dictated the lines to his daughters, who wrote the poem, is disproved by the fact that his daughters never learned to write.

The story that Sir Isaac Newton cut a doorway to admit his cat into his chamber, and then made a separate and smaller one for the kitten, must be mythical, since the philosopher never permitted a cat to enter his apartments.

"Up guards and at them," is believed generally to have been a command of Wellington at the battle of Waterloo. The duke, however, always denied that he had made use of any such words.

The Germans have recently and officially discountenanced the story of William Tell, by ordering that it be excluded from the history taught in the schools.

Two stories of Emperor Charles V are no longer received as truth by critics. One of these is, that he amused himself in his later years in endeavoring to make a collection of clocks and watches keep exact time together. Another is that, in anticipation of his own death, he ordered a mock funeral to be celebrated, and witnessed it.

Mention has been made already of the transfer of many of the stories of ancient Rome from history to folk-lore. Critics regard these as exceedingly valuable adjuncts to history, since they illustrate the manners and life of the times to which they relate.

Ancient history, as related by Greek authors, abounds in exaggerations. The size of the army of Xerxes, doubtless, is greatly overstated. The same is true of the dimensions of the walls of ancient Babylon. The story that Xerxes caused the sea to be whipped in punishment for its damage to his fleets, like the account of Hannibal's dissolving the Alpine rocks with acid to clear his way, and like many of the stories which have been told of Semiramis, Cleopatra, and others, are now received with incredulity. Within recent years the ancient history of Egypt has been deci-

phered from ancient Egyptian writings. Formerly, our supposed knowledge of the subject was derived largely from the books of Greek and Latin authors, who recorded the vague rumors and legends which were told to them of that wonderful land. The true source of Egyptian history (the records of the nation) now take the place of the absurd jumble of folk-lore hitherto received. It will prove an interesting recreation to compare the statements of a recent text-book relating to Egypt, with those contained in almost any book of an earlier day.

Some of the best text-books of general history, in their treatment of early Rome, make use of two kinds of type, one for the authentic history, and the other for the legendary narrative. This is an excellent plan; while both of the latter should be presented, they should be clearly distinguished.

**Famous Sayings Misquoted.**—Many notable sayings of historical characters are incorrectly quoted, or applied so as to give to them a meaning which was not originally intended. Sir Robert Walpole did not really say "All men have their price," but "All *those* men have their price," thus asserting the corruption of specific individuals, and not of mankind.

The famous reply of William Pitt to Sir Robert Walpole, which has been admired for its diction, was not delivered by Pitt in the form in which it is written. Dr. Samuel Johnson, who reported the speech, was not present when it was delivered, and obtained the "points" which it contained at second hand from some persons who were present and heard it.

**Modern Ideas of History.**—The new school of historians differ widely from the old in many particulars; first of all, in the subject matter of their works. The histories written in an earlier period related chiefly to wars and treaties and the lives of monarchs, but said next to nothing of the life of the people and the internal development of the nations. The histories later written take account of all the elements

of the civilization of the countries to which they relate, and portray the condition of the masses, and the development of their industrial and social life. They concern themselves with what the people do and think, what they eat, and wear, what they read, and sing. The later histories take into account the manufacture and commerce, the agriculture and mining, the monetary systems, the jurisprudence, the architecture, the roads and means of transportation, the liberal arts, the literatures, and the education of the nations.

Another characteristic of the later histories is the responsibility of the authors. It is no longer permissible to write history in a slovenly manner, as did Hume, or to give currency to statements on the assumption that they are correct because somebody made them before. Everything must be sifted and carefully inspected. Authorities must be cited, their statements weighed, and their accuracy subjected to every possible test. Original documents must be consulted. Nothing must be received without caution. The man who would write a great history now should be possessed of financial independence, thorough education, and unflagging zeal. He should make his preparation the labor of years, and his book a life work. Histories like those of Goldsmith and Rollin are worthless as such, though cleverly written and entertaining. Histories like those of Motley, Prescott, Bancroft, Parkman, Mommsen, Grote, and Macaulay are marvels of achievement, and will endure for ages.

**Comparison of Historians.** — With these and other characteristics of historians in mind, the comparison of historical writers becomes an interesting recreation. Almost any representative and extended paragraph from an historical work, though read anonymously, contains within itself evidences of the ideas of history in vogue at the time when it was written. A book of selections<sup>1</sup> from the historians

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<sup>1</sup> Shepherd's *Historical Readings* will be found a valuable book for this purpose.

will offer an excellent opportunity for the making of such comparison by classes in history.

**The Personal Equation in History.** — Historians have their favorites and their aversions, and much depends upon the standpoints from which they severally view the personages of which they write. Men of very doubtful character are transformed into demigods by eulogists. Various modern historical writers have distinguished themselves by attempts at the "rehabilitation of old villains." In a library of historical literature you can find defenders of Benedict Arnold, "Bloody" Mary, the Duke of Alva, Richard III, Catherine de Medici, and even of the Borgias.

The value of original sources in the teaching of history should be emphasized by every instructor who is called upon to teach the subject. No two writers of history will draw absolutely the same inference, to its full conclusion, from the sources at their command. Their work will be tinged, unconsciously perhaps, by the medium of their own minds and thoughts, by the influences under which they have been born and educated. In those cases in which men are strongly swayed by passion, self-interest, or religious prejudice, this will be especially true. Napoleon has been called everything from demigod to monster, and was really neither. He has been charged with infamous crimes, or held up as a model of kingly virtues and brilliant genius. The careful study of original sources is the only hope for an adequate idea of this man, the enigma of modern history. Letters, memoirs, state papers of France and of foreign countries, newspapers, military bulletins, the battle fields — each will have its story to contribute to the general impression to be made of the man and of his time.

Cromwell, who has been refused a memorial in the country whose religious and civil liberty he fought to establish and to destroy, waited for the pen of Carlyle to do justice to his life and work through the medium of his (Cromwell's) letters and dispatches.

**Amplification of Lessons in History.** — Children who try to learn history from any single book will almost invariably have an inadequate and incorrect conception of it.

Not long ago I heard, in a recitation, something like this on the subject of Henry II of England :

“He was a very strong king, and established the constitutions of Clarendon. Quarreling with his old friend, Thomas à Becket, he was guilty of the murder of that prelate, although he had no direct part in it himself. From his wife, Eleanor, he inherited as much territory as that over which he originally ruled. He had trouble with his sons, and this was one of the causes that hastened his death.”

This, and more of the same kind, formed what was really a very creditable recitation from the text-book used. It showed that the pupil had studied faithfully the sources at hand. He had learned the facts, the names, and many dates; but that was all. Nothing was said of the youthful Henry fleeing from the enemies of his family, from castle to castle in Anjou and England; of his ancestors, the Counts of Anjou; of the Dukes of Normandy; of his mother's house; of Henry himself — short, heavy-set, bull-necked, freckled, bow-legged, his “countenance of fire,” his wonderful energy, wearing out his court by his furious rides and rapid marches; nothing of Eleanor of Aquitaine, her adventures in the East, her tiring of her monkish husband and falling in love with the young Henry, whom she speedily married; nothing of the legend of “Fair Rosamond,” or of the mother of Becket making her way to England, knowing only two words of English, *London* and *Becket* — with the many other incidents and stories that would contribute so naturally to the interest and coloring of the picture.

These things the teacher must add if he wishes to make the study of history what it ought to be — a subject of the widest interest and value.

**Reference to Original Sources of History.** — Ancient records relating to the United States are rare, and are to be found

chiefly in great libraries. Within recent years these have been popularized in various ways, extracts from old books being published in cheap form for school use,<sup>1</sup> and reproduced often in contributions to current literature, in magazines and newspapers. I will quote here a few extracts from notable old books, relating to American life in colonial days.

**The Flatey Book.** — From No. 3 of the *American History Leaflets* is selected the account of Leif Erikson's discovery of America. It is a translation from the famous *Flatey Book* of the Norse. In it the old Norse words which are not yet understood by scholars are not translated. It may be stated that the Helluland of the Sagas is supposed to have been Newfoundland, and the Markland, Nova Scotia; and that the "Skrellings" were, doubtless, American Indians.

Leif, the son of Eric the Red of Brattahlid, visited Biarni Herulfsson and bought a ship of him, and collected a crew, until they formed altogether a company of thirty-five men. . . . One of the company was a Southern man named Tyrker. They put the ship in order, and when they were ready, they sailed out to sea, and found first that land which Biarni and his shipmates had found last. They sailed up to the land and cast anchor, and launched a boat and went ashore, and saw no grass there; great ice-mountains lay inland back from the sea, and it was a flat rock all the way from the sea to the ice-mountains, and the country seemed to them to be entirely devoid of good qualities. Then said Leif: "It has not come to pass with us in regard to this land as with Biarni, that we have not gone upon it. To this country I will now give a name and call it Helluland." They returned to the ship, put out to sea, and found a second land. They sailed again to the land, and came to anchor, launched a boat and went ashore. This was a level wooded land, and there were broad stretches of white sand, where they went, and the land was level by the sea. Then said Leif: "This land shall have a name after its nature, and we will call it Markland."

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<sup>1</sup> For the History of the United States, the *Old South Leaflets*, and *American History Leaflets* are especially valuable. They can be taken up in class, the necessary explanations having been previously made and the methods of their study outlined.

**A Scene in Old Virginia.**—An old publication, entitled *A Discourse of the Plantation of the Southerne Colonie in Virginia*, contains this description :

Thirtieth day we came with one ship to Cape Comfort: when we saw five Salvages on the shore. When we first came a Land they made a doleful noise, laying their faces to the ground, scratching the earth with their nails. We did think they had been at their Idolatry. When they had ended their Ceremonies they went into their houses and brought out mats and laid upon the ground; the chiefest of them all sat all in a rank. The meanest sort brought us such dainties as they had and of their bread which they made of maize or Gennea wheat. They would not suffer us to eat unless we sat down which we did on a mat right against them. After we were well satisfied they gave us of their Tobacco which they took in a pipe made artificially of earth as ours are, but far bigger, with the bowl fashioned together with a piece of fine copper. After they had feasted us, they showed us in welcome their manner of dancing which was in this fashion: One of the Salvages standing in the midst singing, beating one hand against another, all the rest dancing about him, shouting howling and stamping against the ground, with many Anticke tricks and faces, making noise like so many Wolves or Devils. One thing of them I observed: When they were in their dance, they kept stroke with their feet just one with another, but with their hands, heads, faces and bodies, every one of them had a several gesture: so they continued for the space of half an hour. When they had ended their dance, the Captain gave them beads and other trifling jewels. They hang through their ears fowls' legs: they shave the right side of their heads with a shell, the left side they wear of an ell long tied up with an artificial knot with many of fowls' feathers sticking in it.

When we landed the Werowance of Rapahanna came down to the water side with all his train, as goodly men as I have seen of Salvages or Christians, the Werowance coming before them playing on a flute made of a reed, with a crown of Deare's hair colored red in the fashion of a rose fastened about his knot of hair, and a great plate of copper on the other side of his head, with two long feathers in fashion of a pair of horns placed in the midst of his crown. His body was painted all with crimson with a chain of beads about his neck, his face painted blue, besprinkled with silver ore, as we thought, his ears all behung with bracelets of pearl, and in either ear a bird's claw through it, beset with fine copper and gold.

The manner of baking of bread is thus: After they pound their wheat

into flowre, with hot water they make it into paste, and work it into round balls or cakes; then they put it into a pot of seething water. When it is sod thoroughly they lay it on a smooth stone. There they harden it as well as in an oven.

**Pictures of Life in the Northern Colonies.** — A few extracts from old publications relating to early life in New England and in New York will illustrate the value of such old writings in presenting pictures of the old time. In a letter written in 1658 occur the following words, relative to a law of Massachusetts:

For one law then was, If any entertain a Quaker, and keep him after he is warned by a magistrate to depart, the party so entertaining shall pay twenty shillings a week, for entertaining them. Since hath been made a law, If any entertain a Quaker, if but a quarter of an hour, he is to forfeit five pounds. Another — that if any see a Quaker, he is bound if he live six miles or more from the constable yet he mount presently go and give notice to the constable or else is subject to the censure of the Court (which may hang him).

John Winthrop's history of New England from 1630 to 1649 thus describes Mrs. Hopkins, a literary woman of Boston:

Mr. Hopkins the Governor of Hartford upon Connecticut, came to Boston and brought his wife with him (a godly young woman and of special parts) who was fallen into a sad infirmity, the loss of her understanding and reason, which had been growing upon her divers years, by occasion of her giving herself wholly to reading and writing, and had written many books. Her husband being very loving and tender of her, was loath to grieve her, but he saw his error when it was too late. For if she had attended her household affairs and such things as belong to women and had not gone out of her way and calling to meddle in such things as are proper for men, whose minds are stronger, she had kept her wits, and might have improved them usefully and honorably in the place God had set her.

In a dialogue published in 1648 occurs this description of Mrs. Johnson, wife of the pastor of the Church of God at Amsterdam:



In our time his wife was a worthy matron and very modest both in her apparel and all her demeanor and ready to do good works in her place and helpful to many, especially the poor, and an ornament to his calling. She was a young widow when he married her, and had been a merchant's wife. Because she had a good estate, and was a godly woman : and because she wore such apparel as she had been formerly used to, which was neither excessive nor immodest, for their chiefest exceptions were against her wearing of some whale-bone in the bodice and sleeves of her gown, cork shoes and other such like things as citizens of her rank then used to wear, and although for offence sake she and he were willing to reform the fashions of them so far as might be without spoiling of these garments, yet it would not content them except they came full up to their size.

In the *New England Plantation*, published in 1630, occurs this description :

Now I will tell you of some discommodities that are here to be found. First in the summer season, for these three months June, July and August we are troubled much with little flies called musquitoes, being the same they are troubled with in Lincolnshire and the fens ; and they are nothing but gnats, which, except they be smoked out of these houses are troublesome in the night season. This country being very full of woods and wildernesses, doth also much abound with snakes and serpents of strange colors and huge greatness. Also there are some serpents called rattlesnakes, that have rattles in their tails, that will not fly from a man as others will, but will fly upon him and sting him so mortally that he will die within a quarter of an hour after except the party stinged have about him some of the root of a herb called snake-weed to put on and then he shall receive no harm.

**A Letter of Cromwell.** — Certain documents relating to English history are exceedingly valuable. One of these, throwing a strong light upon the character of the writer, Oliver Cromwell, is an instance in point. Cromwell was one of the strong characters in English history, yet both the great political parties of England had been disposed to belittle his fame and to blacken his character. As a politician he was not sufficiently radical to suit the Puritans, notwithstanding his overthrow of the Cavaliers. The letter mentioned illustrates the principles which generally guided

Cromwell in the selection of men for the government service. A certain Lieutenant Colonel Packer, having been placed under arrest by General Crawford, laid his case before Cromwell, who wrote to recommend the restoration of the disgraced officer. A portion of Cromwell's letter is as follows:

"Ay, but the man is an Anabaptist!" Are you sure of that? Admit he be, shall that render him incapable to serve the Public? "He is indiscreet!" It may be so in some things: we all have human infirmities. I tell you, if you had none but such "indiscreet" men about you and would be pleased to use them kindly, you would find as good a fence to you as any you have yet chosen. Sir, the State, in choosing men to serve it, takes no notice of these opinions: if they be willing faithfully to serve it—that satisfies. I advised you formerly to bear with men of different minds from yourself: if you had done it when I advised you to it, I think you would not have had so many stumbling blocks in your way. Take heed of being sharp or too easily sharpened by others, against those to whom you can object little but that they square not with you in every opinion concerning matters of religion. I have not further to trouble you:—but rest,

Your humble servant,

OLIVER CROMWELL.

**History for Young Pupils.**—History for the lower grades should be largely biographical. Children are fond of stories, and a biography possesses the unity of a narrative. The newer juvenile histories of the United States are largely based upon this idea, being but a succession of simple entertaining biographies of noted men, whose lives were interwoven with the progress of the nation. Biographical sketches of representative men serve for the portrayal of the times in which they lived.

Dr. Henry E. Shepherd says: "I have long advocated the beginning of history teaching by the use of graphic and lively sketches of those illustrious characters around whom the historic interest of each age is concentrated. Such books as Abbott's *Lives of Hannibal, Cæsar, Richard III, Mary Stuart, Elizabeth, Louis XIV, Napoleon*, etc., are

written in narrative style, and presenting history in concrete, biographical form, are vastly superior to the ordinary compendiums as an *introduction* to the study of history. For 'history is the essence of innumerable biographies,' and from the very constitution of the human mind, which, in language, in morals, and in philosophy, first apprehends truth in the concrete, it would seem unwise to introduce the study of history without exhibiting it in concrete forms."

**Supplementary Literature.** — For the larger pupils in history the later and more critical biographies are recommended, such books as the *American Statesmen* series and other standard works being very valuable as auxiliaries to any study of the history of our own country.

Historical novels, such as those of Scott, Mühlbach, and others, will be appreciated by the more advanced classes, and the teacher should be sufficiently familiar with these to suggest and direct such supplementary reading in connection with the historical studies of the class.

**Appreciation of History.** — As in the life of the world the mythical age preceded the historical, so is it in the life of the individual. The age of fable and fairy lore, of Mother Goose and Tom Thumb — may it never pass away! Let us not put solid history into minds too young to comprehend it. Let us leave to the little ones the stories that enrich and strengthen the imagination. To a little child the name of Washington may suggest nothing but a brown little urchin, a hacked cherry tree, and an angry father — all of which, somehow, finally made him the Father of his Country. At the age of ten or twelve, the child may be taught something of real history, which he can appreciate. He can now understand the story of the Greeks, their love and cultivation of beauty, and their love of freedom even to their own undoing. The youth will not soon forget how the little army of Miltiades marched down the slope of Marathon, and the mighty shout as they joined in fierce

battle with the host of Darius. Neither will he forget that morning at Thermopylæ; the companions of Leonidas, combing their long hair behind the low Phocian wall, playing their sacrificial games of skill and strength before offering their lives, for Greece, to the myriads of Xerxes. He will not soon forget the council Clermont; the platform in the open fields, surrounded by thousands of people; the cowed monk, the armored knight, the peasant in his frock, and the women and children in the midst. He will not forget the emaciated form of Peter the Hermit; his words of passion, exhortation, and entreaty, at times stifled by sobs and tears; all of the pomp of the church of the middle ages, and the great cry that burst from the heart of the people, "God wills it! God wills it!" He will remember Godfrey, Bohemond, and Tancred marching away to the rescue of the holy sepulcher; how on the 10th of June, 1099, as the light of day broke over the hills of Palestine, the army of the Crusaders saw below them the holy city; how they prostrated themselves and thanked God that they had lived to see it. "Lo, Jerusalem appears in sight. Every hand points out Jerusalem. A thousand voices are heard as one in salutation of Jerusalem."

The modern history of Europe contains many equally striking pictures which, if properly presented, will fix themselves indelibly upon the mind. The sublimity of the faith of Martin Luther at Worms, his moral courage, the sturdy integrity of his life; the patient heroism of William the Silent, and the determined defense of the Netherlands; Napoleon at Rivoli or at Arcola; the light-hearted, gay patriotism of Camille Desmoulins; the magnificent oratory of Mirabeau; the tragic story of Madame Roland—these are a few out of many.

Another topic, and one touching us very closely, is the history of the Puritans; the birth of the doctrine in the wonderful but somewhat narrow mind of the rigid, ascetic Calvin of Geneva; the soil into which the seed fell; the

Scotch Puritans, their trials and sacrifices, their faith and sincerity, their superstition and cruelty. Add to this the history of the Puritans in Holland and New England, and a new field is opened for a broader and more appreciative study of American history.

Emerson has well said: "We are to read history actively, not passively; to esteem our own life the text, and books the commentary. As we read, we must become Greek, Roman, Turk, priest, king, martyr, and executioner. We must fasten these images to some reality in our secret experience, or we shall learn nothing rightly."

## CHAPTER VIII

### OTHER OUTDOOR AMUSEMENTS FOR LARGER PUPILS

**The Need of Outdoor Amusements.**—The necessity for systematic exercise as a means of physical growth and development is sufficiently apparent to any one who will think upon the subject carefully; but there is one element of child life that has been repressed, stunted, and in cities almost killed by lack of thought, by insufficient appreciation, and too often by entirely mistaken ideas. This element is the love of outdoor play.

The English are by nature a play-loving people. Put half a dozen healthy English boys in any surroundings you please, free from restraint, and in fifteen minutes some sort of a game will have begun. The playground is deemed so important by the Germans that a committee was sent to England, some time since, to investigate the methods of the English playgrounds, the games played, and their value as a means of development. The report of this committee was embodied in the public school system of the Empire. Playgrounds were provided, and instructors to look after them, to suggest games, to have the general management of the sports of the pupils. A report recently made to the Board of Education in the city of New York, recommending the establishment of a new school, not only provides for a gymnasium and bathrooms, but also for ample playgrounds and the necessary appliances. Any one who has been near the ordinary schoolhouse during recess time knows how the spirit of play will find expression in spite of hot pavements,

and narrow and crowded streets, under all possible limitations of time and opportunity. It is the lack of grounds that drives the children of the cities to the streets. It is the want of proper outlets for this natural desire for amusement that drives the young to morbid, vicious, and unhealthful indulgences and habits.

**The Repression of Youthful Spirits Unsafe.** — You can no more repress this tendency with safety than you can tie down the safety valve of a boiler and keep up its fires. A child is a miniature engine, with its fire constantly burning, producing intense activity of mind and body. Mental work is wearing, and will soon produce physical exhaustion in a growing child. This must be counteracted by a constant, careful attention to the child's amusements. The boy who will go away from his fellows to pore over a book (however interesting), and persist in this course, either is mismanaged or needs to be subjected to some sort of energetic treatment. Provision should be made for all his needs.

At the age from six to ten, the time for reading and study should be much less than that for play. From ten to fourteen, the time should be about equally divided; while from fourteen on, the reading and study should be given the greater attention.

The amount of knowledge gained in the schoolroom is not proportional to the time spent over books. In fact, it is often in inverse ratio to it. It is all very well in theory to talk of the wide-awake, energetic teacher imparting to his pupils his own life and vigor, making them quick, active, and attentive; but physical conditions often make this an utter impossibility. Improper ventilation, long hours, and the strain necessary to keep order in a large schoolroom too often produce the forced obedience, the listlessness and indifference that are so common. There is too much of the repressive tendency in education, and until it is eliminated we cannot hope for the best results. It is my experience that no amount of punishment is half so effective as a half

hour's hard play to curb the spirit of mischief and disorder. When this fact is recognized and the proper remedy provided, the government and discipline question will be much more easily solved.

Play must be spontaneous and natural. It cannot be enforced by rule, or learned by rote. It must be attractive and absorbing, so as to command all the energy of the body. For younger pupils, it should not require special training.

**The Direction of School Amusements.** — It is customary in some of the private schools of this country to place the playground in charge of one of the teachers, this constituting a part of his regular work. When the right man can be chosen, a better plan could not be devised. The teacher must be in full sympathy with the boys, and must understand their wishes and desires, their temperaments and dispositions. He must be their companion as well as their teacher, and must possess their confidence and regard. A man in such a position, and filling it well, has an opportunity for good that ordinarily does not fall to the lot of the teacher.

**Objections to the Supervision of Athletics.** — There has been a diversity of opinion as to the advisability of the supervision of athletics, the general rule being to leave this matter in the charge of the pupils themselves. In too many cases the results of the plan have been unsatisfactory, and for widely different reasons. In schools where the regular athletic sports have been in favor, and have been supervised by teachers, the results have shown sometimes that too much time has been taken from the regular work of the class room, and that the exercises themselves have been without the continuity and regularity that would have made them valuable as a means of recreation and growth. The tendency has been to the forming of athletic associations, whose members do all the work, while the remainder of the students applaud and boast of the excellence of their respective teams; so that for thirty or forty



men who do too much in the way of sport, there may be four or five hundred doing nothing. In cases where games with teams from other schools cannot be easily arranged, or where there are other important interests involved, the subject of athletics would be entirely forgotten.

A certain Western college became famous for the number and excellent showing of its orators at the interstate contests, but such a thing as a football team was unknown in it; and its baseball team, extemporized in emergencies, could have been defeated easily by the team of any self-respecting academy. There was no interest in these sports, seemingly because there was no one to begin the movement and keep it up after it had begun. In this instance, the faculty of the institution were much to blame. It seemed to be a fixed idea with them that excellence in the athletic field must mean weakness in the class room; that muscle and brain could not go together; that precious moments would be wasted somewhere. As a matter of fact, the time had been much better spent on the athletic grounds than in the ordinary ways in which the students employed it. This fallacy of the interference of the field and class room is now generally exploded. There will be some students who will not shine in the classes, but will be stars on the field. For one of this class, however, there will be hundreds who will become healthy, sound, strong, refreshed in body and quickened in mind, and who will preserve the proper balance between exercise and study.

**Recreations for Public Schools.**—The principle is the same in the common school as in the college or academy. The boys and girls of the smallest school district have a right to be considered—even a right above that which can be urged in any higher institution. Theirs is the right of childhood to be passed happily, busily, healthfully, and to be supplied, not only with books, teachers, and well-appointed schoolrooms, but also with the inestimable privilege of well-ordered exercise and amusement. Country

schools should have at least an acre of ground for the use of the pupils. In the larger districts, simple gymnasium appliances can be supplied with very little expense or trouble. But in every school, whatever the limitations of the playground and of the facilities for playing games, the teacher should manifest an intelligent, active interest in the recreations of the pupils, encouraging them by opportune suggestions, and by judicious cautions checking any harmful tendencies that may appear in them.

**Outdoor Sports.**—Among the games, exercises, and sports, there are some of the semi-gymnastic character that have obtained a strong foothold in American schools, by reason of their forming a basis for intercollegiate and scholastic contests. While affording exercise and requiring in many cases great bodily skill as well as muscular activity, they are not sports in the most complete sense. To be proficient in them a course of training is necessary; and this cannot be provided always to advantage. In many cases, however, the exercise attending them will be all that the pupil desires, and for this purpose moderate training only is necessary. In these, as in all other sports, the danger of over-exercise or of a strain of the muscles should be emphasized, and all possible means employed that will prevent it. The presence of the teacher is not only advisable, but necessary. The pupil should learn that development of any kind is the result of constant and systematic action, rather than of violence; that he is running a great bodily risk in attempting any exercise new to him with all the strength of his muscular power. Fortunately, these exercises are different from those of the gymnasium in this respect. Ordinary outdoor sports, when common care is exercised, are progressive, naturally accommodating themselves to the strength of the players.

**Old Football.**—The old-fashioned game of football is played by dividing the players equally and marking lines at the end of the grounds parallel to the direction of play.

The object of the game is to send the ball by kicking or striking with the hands over the opponents' line. No tackling, or running with the ball, should be allowed. The game is a very exciting one, and almost any number of players may engage in it. For purposes of exercise, it is better than the Rugby game. The game is described by a Greek writer of the second century. It was also played by the Norsemen and by the people of lower Germany in ancient days.

**Games with Soft Balls.** — There are a number of games, some of them centuries old, that involve the hitting of one of the players with the ball. These games are very exciting and amusing, provided the ball is of the proper kind. A ball made of rags wound rather loosely is the best.

Call ball is based on an old Roman game, and is probably much like the one played by Nausicaa, the daughter of King Alcinous, and her maidens, after they had spread their washing to dry on the rocks by the river side.

The players form in a row and the ball is thrown against a wall; at the same time, the one throwing it calls out the name of one of the other players. The player whose name is called must strike the ball back on the bound, calling out the name of some other player. If he misses the ball, the players scatter. He calls "Stand!" as quickly as possible, after missing the ball, and the rest of the players stop in their places. He then throws the ball at any one he chooses. If he hits him the game proceeds as before, the one hit throwing the ball against the wall. If the thrower misses the person thrown at, he places himself in a bent position against the wall, and every player throws at him.

**Haley Over.** — The players choose sides, and take positions on different sides of a building. One of the boys throws the ball over the house, calling "Haley over!" as he does so. If a player on the other side succeeds in catching the ball, he darts around the corner of the house and tries to hit some one of the opposing side. If one is hit, he then

belongs to the other side. There is no means of knowing whether the ball is caught or not, until the other side appears.

**Roll Ball.** — A row of holes (large enough to contain the ball) is made, one for each player. The boy who has the last hole takes the ball, and rolls it in such a way that it will lodge in one of the holes. The boy who is stationed at that hole takes out the ball (while the rest scatter) and tries to hit one of them. If he succeeds, the boy who is hit places a stone in his hole. If a thrower misses, a stone is placed in his hole. When five stones are placed in one hole, that boy is out.

**Baseball.** — The modern game of baseball is too well known to need any description. It originated perhaps in the game of "old cat," in which there were only two bases — the striker's and the pitcher's. After the ball was hit, the striker changed from one base to the other. If hit during the run, or if the ball was caught before it reached the ground, the player was out. The name was varied to "two old cat," according to the number of batters. In the old form of baseball, there were three bases besides the home base, and the number of players was not limited. After hitting the ball, the batter ran the bases. The ball was thrown *at* the runner. If he was hit, he was out. In some forms of the game the batter was out if the ball was caught before it struck the ground. Each player had to be put out separately. If there was only one runner, the ball was passed from the pitcher to the catcher, while the base runner tried to "steal" the bases. If hit with the ball, he was out; if not, he was allowed to take one member of his side who had been put out before. In some cases a runner was considered out if the ball passed in front of him.

**Corner Ball.** — An old game in Pennsylvania is "corner ball." It is played by eight boys, four stationing themselves on the corner of a square, four others in the center. The ball is passed from one to another of the players, and when not expected is thrown at the players in the center. If any

one is hit, he is out of the game. If one of the players in the center catches the ball, he throws it at one of the corners.

**Shinny in a Hole.**—This game is so well known that a description of it may not seem necessary. It is very exciting, however, and is inserted for the benefit of a few who may never have played it. A number of holes, one less than the number of players, is made. Each player provides himself with a stick about three feet long, bent slightly (or having a knot) on the end. Each boy places the end of his stick in a hole, and the remaining player drives the ball, called the "pig," at one of the holes. Each player tries to strike the ball away as it approaches him. As soon as his stick is out of the hole, any player can appropriate it by putting his stick into it. The boy who is driving the "pig" tries to put his stick into any hole left unguarded. The one who is left out of the game must drive the "pig."

In some parts of Pennsylvania this game is known as "old pig," or "blind pig."

**Shinny.**—The name of this game is a corruption of the Scotch name *shinty*, from which it came. It is called "hockey" in England and in some parts of the United States, and "bandy" in Wales. It is played with a little wooden ball about as large as a tennis ball, and with bats that are curved or have a knob at the end. The number of players is not limited, but a good rule to follow is to organize another game when the players become so numerous that they interfere with the amusement.

Bounds should be marked out about one hundred yards long and fifty wide, the goals being indicated by little flags. The players choose sides, and determine by chance who is to strike the ball first.

The ball is placed in play about one hundred yards from the strikers' goal. The object of each party is to drive the ball over the opponents' goal.

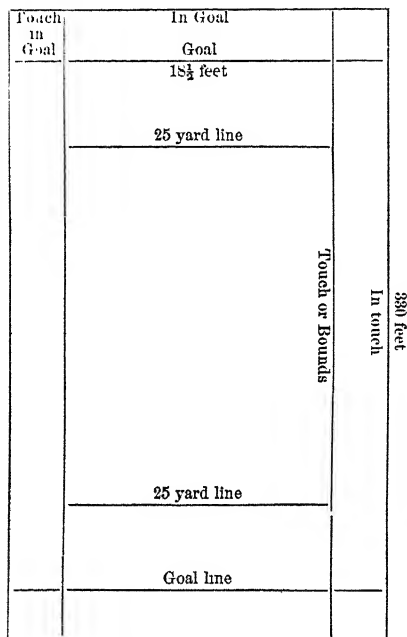
**Fives.**—The game of fives is a very common and famous English game. A modified form of it may be seen at almost

any time among the youthful players of our cities. It is an interesting game if played entirely without rules, as I have usually seen it played. A wall, having a smooth piece of ground in front of it, is selected, and a line is drawn on the ground, one yard from the wall. A line is also drawn on the wall, one yard from the ground. The ball used is an elastic, soft, rubber ball, and is struck with the hand, so that it shall hit the wall above the line, and on the rebound strike the ground outside of the line. The ball is dropped to the ground before being struck to the wall. Only a small number of players can engage in the game at once. Four is a convenient number. They may be partners, being arranged from right to left in the order 1, 3, 2, 4, one and two, and three and four, being partners. If either of the players fails in hitting the ball or in striking it against the wall, or strikes it out of bounds, he is out.

**Cricket.** — The famous English game of cricket is so complicated that it will be impossible to attempt a description of it here. The game is played with eleven men, is much more interesting than baseball and not so dangerous or so rough as football. It is to be hoped that the game will become much more general in this country. If it once becomes well known, it will certainly be appreciated. A number of good manuals for the conduct of cricket matches can be obtained from any dealers in athletic goods and publications.

**Modern Football.** — The modern game of football has become a question of strength, quick wits, and endurance. It demands bodily training and practice for steady nerves; iron muscles, long breath, and thorough familiarity with all the rules of the game are required. Codes of signals for play are devised, and these have to be changed often to prevent opposing teams from becoming too familiar with them. The chief objections to the game are that it requires only a small number of men, and that the manner of play is almost certain to be rough. It is by no means necessary

to omit the game on this account, but all roughness should be discouraged or forbidden, and as many different teams as possible should be organized. In preparation for match games, however, the ordinary usages and customs of the game will have to be followed, and it is only in the practice field that they may be somewhat remitted.



There is no exercise or game that will test the powers of a player more completely than this. It is a mistake to confine all coaching and training to college teams; for even more advantage will result if the careful work is begun in the secondary school. The game is played with eleven men on a side, classified and arranged as the "rush line," a quarterback, two half backs, and a back, or goal keeper. Seven men usually form the rush line, and are known as the center rush, or snap

back, the right and left guards, the right and left tackles, and the right and left end rushers. The grounds are 330 feet long and 60 feet wide. At each end goal posts are placed  $18\frac{1}{2}$  feet apart and surmounted by a crossbar placed at 10 feet from the ground. Transverse lines five yards apart are usually marked on the field, so that the umpire can tell at once how much of an advance either side has made. The ball is placed in play by a "kick-off" from the

center of the field. The opposing side must be at least ten yards behind the ball at the kick-off, and were the ball actually kicked, it would probably land just where the opponents would most like to have it. For this reason the ball is just touched with the foot and then handed to some player near by, who runs with it towards the opponents' goal.

He is protected by all the players of his own side, and the object of the opposing players is to "hold" or stop him. As soon as he ceases to make progress he calls "down," and the ball is placed on the ground for another scrimmage. The side having the ball must make a distance of five yards in three downs, lose twenty yards, or give up the ball. When the ball passes out of bounds, it must be brought back to the exact spot where it crossed the line before being placed in play. The game goes on in this way, until one side is near its opponents' goal. The ball may be carried across the goal line by continuing to advance in the same manner as before, or by a drop kick. In the former case, a kick may be attempted after the touchdown is made. The drop kick may fail, and, if so, all the advantage previously gained will be lost. If either side is driven close to its own goal, and the opponents seem likely to score, a safety touchdown may be made by one of the players carrying the ball across his own goal. This scores two points for the opponents, but allows the side making the touchdown to take the ball to the twenty-five yard line, and kick it out by a drop or place kick. In keeping score, a goal from a touchdown counts six points, a goal from the field five points, and a touchdown four points. The game as it is now played consists almost altogether of team work, and a great deal of the success is due to the captain or the coach. The captain must be clear-headed and quick-witted; at home in any part of the game or of the field. He must have perfect control over his men, and be able to arouse their enthusiasm in trying positions. He must be confident of himself and of his men. A great many systems



of signals have been devised for use in the games. Certain numbers or certain proper names are sometimes used. Placing the hand in certain positions on the body, or touching the player according to some previously concerted plan, will give good results. There must be no mistaking these signals, however. They are intended to mystify one's opponents, and not to confuse one's own team. They must be practiced constantly, and should be as few in number and as simple as possible, without becoming intelligible to any one. There are a number of books<sup>1</sup> upon the subject of football that give full directions for players in different positions, the rules, and details of the game.

**Rounders.**—Another excellent form of ball game is the English "rounders." In principle it is much the same as baseball, but it requires more players, and the rules are not so many or so invariable. The ground is marked out in the form of a regular pentagon, and the bases may be any convenient distance apart, as twenty yards. The home base is within the angle of the pentagon; the pitcher is placed at the center; the catcher behind the home plate. The outfielders should be well scattered so as to cover all parts of the field. There should be at least twelve on a side, and twenty or thirty will not be too many. The ball should be light and very elastic, and the bats much lighter than those used in baseball. The players bat in turn, and each player may refuse three balls, but must strike at the fourth. The rules for base running are the same as those for baseball; the runner goes as far as he can. If he succeeds in making all the bases, the run is termed a "rounder." A player is out

(1) If he fails to hit the ball.

(2) If he tips it and it falls behind him.

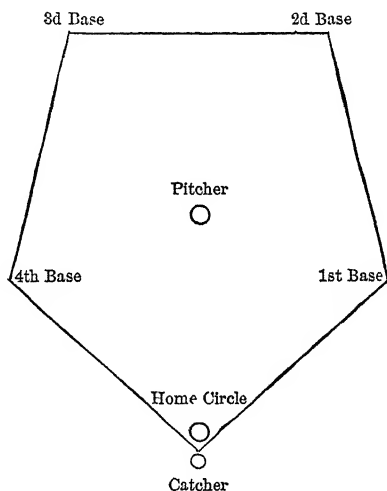
(3) If the ball is caught before it touches the ground, or on the first rebound.

(4) If he is hit with the ball while running between the

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<sup>1</sup> Walter Camp's *American Football* and A. A. Stagg's book on the same subject are among the best of these.

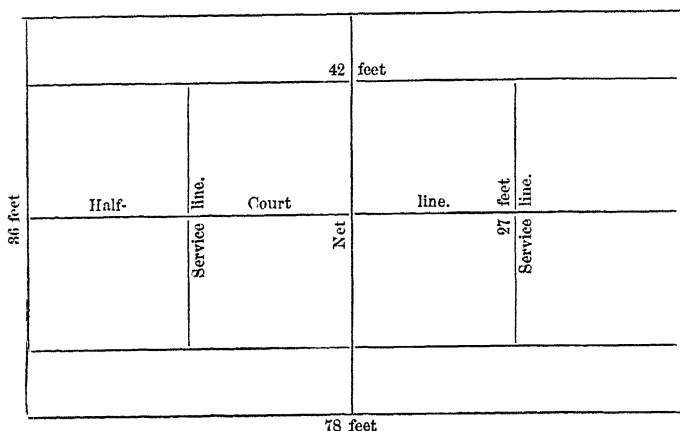
bases. The pitcher may pretend to throw the ball, to induce the runner to leave his base. The innings may be continued until a whole side is put out, or may be terminated by any number of "outs" previously agreed upon. The batters must stand in the home circle when not batting or running bases, and if any one leaves the circle he may be hit with the ball and put out. If all of the players but one of a side are out, this one has three chances to make a "rounder," after which all or part of his side may bat again.



If the last batter should be put out, leaving men on bases, the pitcher must run to the home circle and ground the ball, thereby "putting out" all of the base runners.

The success of the game depends on the fielding. All points of the out field should be guarded, and the fielders should place themselves in such a position that they may get the ball quickly if a throw is made at a runner and he is missed. The game may be modified almost indefinitely. Girls find it splendid exercise.

**Lawn Tennis.** — The game of tennis is often regarded with some contempt by football and baseball players. It is sometimes called a girl's game, and thought to be scarcely worth consideration by men or by athletes. All things considered, it is perhaps a better general game than either football or baseball, for it requires just as much quickness, as much bodily and muscular skill, and constant though not violent action.



It is a good game for the busy man who has only an hour or two to spend for exercise, but wants to employ that time in as lively a fashion as possible.

The tennis court is 78 feet long and 36 feet wide. The net,  $3\frac{1}{2}$  feet high at the ends and 3 feet in the middle, is stretched across the center of the court, and supported at the proper height by an iron fork placed under it. In single games, the inside lines become the boundaries of the court. The ball is inflated rubber, generally covered with flannel, and not less than two and one half inches in diameter. Most players will find the fifteen-ounce racket to be sufficiently heavy, but that racket should be selected which will

meet the player's own requirements. All prominent dealers make first-class rackets, but shape, weight, balance, and the methods of each individual player will determine the one to be selected.

The player, in serving, stands with one foot on or across the back line, the other behind it, and drives the ball over the net into the diagonally opposite court formed by the inside lines, the half-court line, and the service line. If the ball strike the ground outside of these lines, the service is a fault and the player is allowed another trial. The ball is received on the first rebound, and is struck back. After the first return, the ball may be hit on the first rebound, or while still in the air. The first service is from the right court; after that, from the right and left alternately.

The players serve in turn, the opposite sides serving alternately. A player must not serve a ball until his opponent is ready. When a ball hits into the net or goes outside the lines of the court, the point is counted against the player making the fault. If a server make two faults, the point goes to his opponents. A player must not touch the ball with his racket more than once, or hit the ball before it passes the net, or touch the net or any of its supports while the ball is in play.

The first two strokes count 15 each; the next, 10 each; 50 points being the game. If both sides have won three strokes each, the score is called deuce and two consecutive winning strokes are required to win the game. The first player who wins six games wins a set, unless each side has won five games, when the winning of two consecutive games shall decide the set.

The common form of service is the overhand stroke, delivered by throwing the ball in the air to almost the height of the center of the racket, and striking it from left to right, or striking it directly. The cut will diminish the speed of the ball, but will cause it to change direction before bounding. For the underhand serve, drop the ball, and when about

twelve inches from the ground, cut at it from right to left. For direct service, hold the ball almost a foot away, and, with the arm in a horizontal position, strike for the top of the net. Do not make the mistake of attempting a too difficult service. Begin with a slow service, if necessary, until you have learned to get the ball over the net, and to place it where you please; then practice for speed.

Grass courts, where the sod is rolled hard, and the grass kept short, are the best; but courts are made sometimes by leveling a piece of ground and covering with clay, or in some cases placing a top of Portland cement on a cinder bed. There should be a space of at least ten feet on the sides, and fifteen at the ends of the court, that is prepared in the same way as the court itself. There can be very little freedom in play if the player is cramped by the boundaries or is obliged to watch the ground as well as the play. The players should endeavor to cover the court as completely as possible. When one is serving, the other should be close to the net; and near the line to prevent a ball's being placed on the off side. As soon as a player has served the ball, he should run toward the service line, so as to protect the court not occupied by his partner. One of the players (the server ordinarily) plays in the back courts, and the other near the net; or both may play from somewhere near the service line. The latter place is perhaps advisable, as there is not so much danger of the player's interfering with the movements of his partner. The beginner should remember that tennis is a game of skill, and that constant practice is the only thing that can make him an expert; that the same stroke must be made over and over again; that he is called upon at every moment of the game to judge distances, places, and the effect of his own stroke.

The exercise and pleasure of the game amply repay for the time spent in practice.

**Hare and Hounds.**—One of the best games for boys is hare and hounds. Two boys are selected as "hares,"

and are given a certain time or distance as a start. They carry with them bags of paper, cut into fine pieces, and they scatter these to form the trail. They may double upon the track, or use any other device to baffle their pursuers, but the trail must be distinct. It is a good plan to fix a time during which the hare shall run, before starting for "home." For large boys, two hours is a good limit; for smaller boys, from one to one and one half hours.

The "hounds" should choose a leader and, in running, keep in single file, from three to seven yards apart. A "whipper-in," one of the larger and stronger boys, should be the rear guard. The leader generally carries a horn, which he blows when baffled or off the scent. In case two "hares" are chosen, they should be required to keep together. If different "scents," or trails, are allowed, there is so much time lost in finding the true one that the game often loses half its interest. A two-mile run is long enough for beginners. The distance may be increased to five or seven miles for boys fifteen or sixteen years of age, and practiced runners think nothing of twice the distance.

**Follow My Leader.** — Follow my leader can be made very funny if some quick, adventurous boy be selected for the leader. The boy chosen places himself at the head of the line and commences the game by running, climbing, or jumping over any obstacle that may be in his way. The followers are obliged to do just what the leader has done. If any one of them fails, he takes his place behind the rest. The game may be continued until all have failed once, or as long as the leader chooses.

**Prisoners' Base.** — Prisoners' base is a famous old game, probably too well known to require a place here. There may be a few persons, however, who have never played the game, and it is inserted for their benefit.

There should be about seven or eight players on each side, although the number is not definitely fixed. Two bases are marked out, one at each end of the grounds, which must be

about two hundred feet long. The bases are made large enough to hold all the players of each side. Two "prisons," about the same size, are marked at the ends of the ground, the base of one side being opposite the prison of the other.

The game is begun by the "stag," who runs from his base to the center of the field and challenging the opposing side to capture him. One of his opponents is usually sent out, then another from the first party, followed by one of the second, and so on until each side sends out all the men it can spare. A player is allowed to catch any other player who has previously left the base, but he cannot catch any one of his opponents who has left the base after he has left. If a player has captured a prisoner, he cannot be touched until after he has reached his base. Every "prisoner" must remain in "prison" until rescued by the touch of some one of his own party. The game is decided when all of a side have been captured, or by any player finding his opponents' base unguarded and taking possession of it.

**Golf.**—It is probable that the Romans played a game something like golf. For years it has been the national game of Scotland, and has been played also in England and in the United States, where within the last two years it has become very popular. Several holes, four inches in diameter, are cut in the ground, and the turf around is smoothed slightly, to help the player in "holing" the ball. The holes are arranged ordinarily in a circle, and from eighty to five hundred yards apart. Each player (or each "side," where there are partners) has a hard gutta-percha ball, about  $2\frac{1}{2}$  inches in diameter, which he drives with a "club" from one hole to another. The object of the game is to drive the ball into each of the holes in order, with the fewest possible strokes. Bushes, sandy spots, and sloping grounds are considered rather as advantages than otherwise. The player is provided with several kinds of clubs, to use when the ball gets into an awkward position. The player or side that "holes" the ball with the

fewest strokes wins the hole, and the player or side that wins the greatest number of holes wins the game.

Golf is a game that certainly deserves to be popular. It furnishes plenty of exercise for the muscles, combined with walking, and is a moderate form of amusement, that cannot injure any one even of those who are not much accustomed to exercise.

Let it be said, in conclusion, that the teacher should feel an interest in the sports of the pupils that is as great as his interest in their studies; for play is an essential of healthy development. Every honest, sound, and hearty game is just so much added to the reserve force of health for the future; is just so much added to the light-heartedness of the present. It does something, at least, to defer the time when the care of business and the work of life may take away all opportunity, if not all prospect, of pleasure in the sports of one's youth.

This bodily exercise is so healthy, so invigorating, in a system of life where so much is unhealthy and weakening, that it is worth almost any effort to keep alive and build up the interest and love of our American boys for the field games and sports that will help, at least, to make them strong, active, and earnest men.



## CHAPTER IX

### SCHOOL COMPOSITIONS

**The Study of English.** — A consideration of school compositions brings up the broad subject of the teaching of English in primary and secondary schools, a subject upon which there has been a vast amount of discussion, and wide differences of opinion have been manifested. The questions involved in this, when judged from the standpoint of results, seem far from solution at the present time. However, the *Report of the Committee of Ten* in relation to the study of English in the lower grades and in the high school affords a basis upon which all teachers can coöperate.

The primary object of school work in English composition is, first, to develop in the pupil the habit of logical and connected thought; next, to teach him to express this thought in pure, plain, and idiomatic English; and, finally, to acquaint him with the differences of style, developing a discriminating appreciation of literature in its various forms.

**English Grammar.** — For a very long time it was thought almost universally that formal grammar was the true basis of all teaching of English. This extreme led to the opposite, giving place to the idea that no formal grammar at all is necessary. Naturally, the best results in education are found to come from a combination of the two systems which resulted from these opposed theories.

There is no reason why children, when they have learned to read fluently, should not be taught the elements of grammar — the names of the parts of speech, with the value of

each in the sentences, and the different forms of sentences. "Not earlier than the thirteenth year of the pupil's age," says the *Report of the Committee of Ten*, "the study of formal grammar, with drill in the fundamental analysis, may be taken up. It should not be pursued as a separate study longer than is necessary to familiarize the pupils with the main principles. Probably a single year (not more than three hours a week) will be sufficient. Subsequently, although grammatical analysis (as an instrument of interpretation and criticism) may properly accompany reading and the study of composition, it should not be regarded as a separate study in the curriculum."

**Original Written Compositions.** — Original composition can hardly be begun too soon. "Not later than the first term of the third school year, children should begin to compose in writing." Before this term, and from the time they are able to read and write, they should copy and write, from dictation and from memory, brief and simple compositions of poetry or prose, as an exercise in penmanship, spelling, capitalization, and punctuation. At first the exercises may be those of reproduction of short stories told by the teacher or read by the pupil, such reproduction being almost entirely oral; later on, it should be largely written. In these exercises the pupils should not be allowed to use words whose meaning they do not fully comprehend. Written exercises from dictation may be used frequently, with good results. As soon as practicable, the pupil should begin to arrange his own ideas and to give them expression on paper. If sufficient attention is given to the correction of such exercises, and if corrections are hinted at rather than made directly, the pupil will soon learn to discover and correct his own mistakes; to make an intelligent choice between different forms of expression, and to give a pleasing rather than an abrupt turn to his sentences.

Excellent subjects for school compositions may be found in a pupil's own experiences. The work should be a per-

fectly natural, honest expression of his thoughts. The teacher should not encourage or allow attempts at "fine" writing.

The study of English should not be confined to exercises of recitation in that subject, but should be introduced indirectly into every form of school work. Mathematics and the natural sciences afford opportunity for the use of accurate forms of expression. History and the translations from various languages give scope to much more varied forms of language. Indeed, there are few more profitable exercises than translation, if the thought be clearly understood and expressed in pure, idiomatic English. The so-called literal translation should not be allowed, except for grammatical purposes; for generally, it is a collection of words strung together artificially, presenting no connected thoughts or definite order, and bearing little resemblance either to the original or the language into which it has been changed.

The series of reading books in common use should be discarded not later than the seventh or eighth year of the pupil's course, the remaining time being given to the study of prose and of narrative poetry, complete selections being generally used when obtainable. The selections may be made the basis of frequent compositions.

Incidentally the pupil may be taught much of the history of the English-speaking peoples, the sources and the modifications of their language. From first to last, much attention should be given to the vocabulary, to the study of synonyms, to the differences that often exist between words which commonly are regarded as exact synonyms, and to the choice of the right word to express a given idea.

Exercises in the expression of thought should be constant, from the time when the child enters the schoolroom until he leaves it. Not a day should pass without written or oral work of some kind; no opportunity for permitting the child to express his thoughts upon subjects of interest should be

passed by. He should be encouraged to talk and write freely, under the direction of the teacher, upon the topics connected with his studies or his experiences outside of school. He should be made to feel that it is an honor and an accomplishment to be able to talk well or to write well, and that failure to do so is in some sense a disgrace; that it is not impossible for any one who has the time, patience, and industry, to acquire facility of expression. It may be necessary here to enforce again the idea that quality is above quantity, and emphasize clearness and brevity, and the evil of repetition.

The time allowed for exercises in composition may be from ten to fifteen minutes, according to the subject in hand and the pupil's knowledge of it. When the themes are longer and more studied, as in the case of older pupils, it is well to review the papers separately, with the pupils, pointing out mistakes in the use of words and punctuation, and in the use of capitals; calling attention to sentences that are labored or involved, and suggesting better arrangement or choice of words.

I would have the teacher bear in mind the fact that work in composition must be gradual. The reason why the bare mention of a composition is sometimes enough to produce signs of rebellion in an ordinarily obedient school, is because the pupils do not know how to go about it. It is as if they were ordered to build a triple expansion engine, or to prove the truth of Newton's demonstration of the theory of gravitation.

They have few ideas upon any given subject, or, perhaps, their ability to express these ideas is limited. When their best work is done, it appears crude and incomplete; and apparently, no amount of endeavor will better it. There is a feeling of helplessness, of utter weakness, that comes from lack of practice or lack of interest.

**The Use of Books of Reference.**—The length of a composition is immaterial; but as far as possible it should cover

the subject assigned, and should be arranged logically in an order consistent with the development of the subject. The pupil should be credited upon the excellence of the thought and its arrangement, rather than upon the length of his composition.

The teacher will meet and will be compelled to combat a constant tendency to copy — a tendency which, sooner or later, if permitted, will make the expression of the pupil's own thought next to impossible. In many cases the copying is intentional and voluntary, the pupil finding it too much trouble to write the composition from his own knowledge. More frequently, perhaps, he is not willing to undertake the labor necessary to prepare him for an intelligent handling of the subject. He has recourse to a cyclopedia, a biography, or a collection of essays, and his work is a poor, unintelligent arrangement of borrowed sentences or borrowed thoughts; while the only possible benefit arising from it lies in the facts which he may have learned by this system of copying.

In many cases the fault is partly or wholly the teacher's. Subjects for compositions are assigned which are too difficult for the pupil to handle without assistance, and for this he is directed to various books of reference; or subjects are assigned whose treatment is purely descriptive or historical, making the temptation to copy almost irresistible for pupils without much originality.

Where the proper limitations of the use of reference books are not taught, the pupil is allowed to infer that he may use as much of the book as he finds suitable for his purpose; and frequently a composition made up of such selections, when showing care and discrimination in choice and arrangement, is more highly prized than original work — though the latter may represent far more thought, and may be of much greater value to the pupil.

There are various exercises which may precede and introduce the work of purely original composition, and which

are so interesting in their nature that the pupils will regard them rather as recreations than as tasks. Among these are exercises in making abstracts, outlines, amplifications, and paraphrases, the more simple of which should engage the attention of the younger pupils especially. Some illustrations of these forms of composition are given here, as suggestions to the teacher.

**The Abstract.** — An abstract is an epitome or summary — a condensed form of the thoughts of another. It should contain in substance all the principal thoughts and events of the original, but should be expressed in shorter form, omitting many details. To begin with, a very short and pointed story in verse may be read to the class — and perhaps read twice — and the pupils can then prepare their abstract from memory. After a few short poems have been used, a longer selection may be taken.

The familiar and true story of John Gilpin, as told in Cowper's poem, which has amused generations of children in all the English-speaking world, affords an excellent exercise in making abstracts. While told at considerable length, it may be summarized in a brief and simple narration, as follows:

John Gilpin was a well-known merchant of London, and a captain of the militia. When he had been married twenty years, he agreed that all his family should celebrate his wedding day by going to Edmonton, a few miles away, and taking dinner with him at a hotel called "The Bell." His wife, with the three children, her sister, and her niece, went in a carriage. Mr. Gilpin was to ride behind, upon a horse, which he had borrowed from his friend, a calender (or finisher of cloth) by trade, who lived ten miles from Edmonton. He was delayed in starting, by waiting on a customer at his store. He set out at length, wearing his long cloak, and a leather belt, to which he fastened two jugs of wine, which his wife had forgotten to take. He was not used to horseback riding, and could not manage the horse. Fearing he should fall, when it began to gallop, he seized hold of its mane. This caused it to run all the faster. Mr. Gilpin's hat and wig blew off, and then his cloak also, for the loop which tied it broke. The jugs were thrown violently upward in the gallop, and broke, the

wine falling upon the horse and causing it to run all the faster. The gatemmen along the road opened the gates for Mr. Gilpin to pass, thinking he was running a race. From the hotel porch Mrs. Gilpin saw him going by with great speed, and called to him, but he could not stop. The furious ride continued until the house of the calender was reached. That gentleman brought out his own hat and wig for Mr. Gilpin, and encouraged him to ride back to Edmonton. Just then a donkey brayed, and the frightened horse started back to London with its rider. The calender's hat and wig blew off at once, for they were too large. Mrs. Gilpin, in alarm, had sent a boy on a horse, after her husband. The boy met him coming back, and, turning around, tried to overtake him. This chase led people to think that Mr. Gilpin was a robber, and several horsemen began to pursue him with loud cries. The gatemmen all thought, as before, that Mr. Gilpin was riding a race, and threw the gates open before him. The chase never ceased until the poor man was carried by the runaway horse to the store in London from which he first started. Mr. Gilpin's unhappy wedding day was the subject of much good-humored sport to his acquaintances.

**Poems Suitable for Abstracts.**—To prepare an abstract of a selection of some length, as the foregoing, the pupils should read very carefully a whole story, separating it into its essential parts, and should understand clearly the relations between these parts. They should then express in their own words, and as simply and concisely as possible, the thought of each topic of the story. The teacher should not allow the abstracts to be too long, and should see that the parts of the story are emphasized in the order of their importance. Pupils should avoid using the language of the author, except in cases where no other choice will answer so well.

In a manner similar to that of the preceding, extracts may be made from the shorter poems of Longfellow, Whittier, Tennyson, Byron, Lowell, Saxe, Scott, and others. Among the poems most suitable for this purpose are the following :

*The Two Church Builders* . . . . . John Godfrey Saxe.  
*The Good Dog of Breda* . . . . . John Godfrey Saxe.  
*The Blind Men and the Elephant* . . . . . John Godfrey Saxe.

<i>The Lord of Burleigh . . . . .</i>	Alfred Tennyson.
<i>The Sleeping Paluce, from the Day Dream</i>	Alfred Tennyson.
<i>The Lady of Shalott . . . . .</i>	Alfred Tennyson.
<i>The Eve of St. Agnes . . . . .</i>	John Keats.
<i>The Exiles . . . . .</i>	John Greenleaf Whittier.
<i>The Witch's Daughter . . . . .</i>	John Greenleaf Whittier.
<i>Cobbler Keezar's Vision . . . . .</i>	John Greenleaf Whittier.
<i>King Solomon and the Ants . . . . .</i>	John Greenleaf Whittier.
<i>The Norman Horseshoe . . . . .</i>	Sir Walter Scott.
<i>The Village Blacksmith . . . . .</i>	Henry W. Longfellow.
<i>The Slave's Dream . . . . .</i>	Henry W. Longfellow.
<i>Walter von der Vogelweid . . . . .</i>	Henry W. Longfellow.
<i>The Emperor's Bird's Nest . . . . .</i>	Henry W. Longfellow.
<i>Paul Revere's Ride . . . . .</i>	Henry W. Longfellow.
<i>On Lending a Punch Bowl . . . . .</i>	Oliver Wendell Holmes.
<i>Lady Yeardley's Guest . . . . .</i>	Margaret J. Preston.
<i>The Vagabonds . . . . .</i>	John T. Trowbridge.

**The Outline.** — An outline differs from an abstract in that it includes merely the headings of the different parts of the story, poem, or book. In making an outline from a given selection, it is necessary to read the selection carefully and to determine the principal divisions made by the author in the treatment of his subject. These will form the headings for the different topics of the outline. There will be, usually, sub-heads of parts of these principal divisions. Whether the pupil shall take note of these or not, will depend upon the selection chosen, its length, and the number of elements that enter into it, as well as upon the ability of the pupil to comprehend them. Let the pupil become accustomed to the formation of the outline from the selections that are given to him, and then form outlines for use in his own compositions. In many cases a given selection will divide itself naturally into three parts—the introduction, the story, and the conclusion. Where a story is told in separate parts, an outline may be made for each part.

As an example of the foregoing, here is an outline of the introduction to the first canto of Scott's *Lady of the Lake*:



<i>The Introduction.</i>	{	Invocation to the minstrel's harp.
		Its former power.
		Its present silence.
		Purpose of the poem.
<i>The Story.</i>	{	The scene.
		The starting of the stag.
		The pursuit by the hunters.
		The king leaves his companions behind.
		The stag escapes.
		The king's horse dies of exhaustion.
		The king summons help.
		He is taken to the island.
<i>The Island Lodge.</i>	{	His coming foretold.
		Description of the lodge.
		The fall of the sword.
		The song.
		The dream.

Such an outline, of course, is a suitable exercise for only the more advanced classes of pupils, who have acquired some acquaintance with literature in its higher forms.

**Amplification and Paraphrase.**—Amplification and Paraphrase are important, as they lead directly to original composition. Amplification is the expansion of the thought of an author, while abstract is its abridgment. More thought and care are required for its preparation, because it implies the addition of facts or incidents that are not really in the story and these must be in harmony with the rest of the selection. Before beginning the work of amplification, the story should be thoroughly mastered in all its details, the principal points noted and their proper order and relative importance determined. To this arrangement should be added the incidents that would naturally occur in the further development of a part or parts. This may be done by noticing what has been omitted. When all the incidents that would be likely to occur have been supplied, the pupil forms the whole into a connected story, avoiding as far as possible the use of the words of the author. At first, simple

sentences may be used for exercises in amplification; later on, paragraphs; and, finally, poems or other connected narrations. The work must proceed much more slowly than the making of outlines or of abstracts, and the assistance of the teacher should be given regularly until the pupils have acquired the habit of fairly accurate analysis.

For an example of amplification, the following passage from Longfellow's *Courtship of Miles Standish* has been selected. The amplified exercise appended was made by a pupil in class, after a fair amount of practice, and no assistance was rendered by the teacher in this case:

In the old colony days, in Plymouth, the land of the Pilgrims,  
To and fro in a room of his simple and primitive dwelling,  
Clad in doublet and hose, and boots of Cordovan leather,  
Strode, with a martial air, Miles Standish, the Puritan Captain.  
Buried in thought he seemed, with his hands behind him, and pausing  
Ever and anon, to behold his glittering weapons of warfare,  
Hanging in shining array along the walls of the chamber, —  
Cutlass and corselet of steel, and his trusty sword of Damascus,  
Curved at the point and inscribed with its mystical Arabic sentence,  
While underneath in a corner were fowling piece, musket, and match-  
lock.

Short of stature he was, but strongly built and athletic,  
Broad in the shoulders, deep chested, with muscles and sinews of iron.  
Brown as a nut was his face, but his russet beard was already  
Flaked with patches of snow, as hedges sometimes in November.  
Near him was seated John Alden, his friend and household com-  
panion,

Writing with diligent speed, at a table of pine by the window;  
Fair-haired, azure-eyed, with delicate Saxon complexion,  
Having the dew of his youth and the beauty thereof, as the captives  
Whom Saint Gregory saw, and exclaimed, "Not Angles but angels!"  
Youngest of all was he of the men who came in the *Mayflower*.

(AMPLIFICATION OF THE FOREGOING.)

It was early in the spring in the old colony of Plymouth. The trees were beginning to bud; the birds, home from their winter pilgrimage, were making preparations for their annual house building, and all nature seemed glad that the winter was over. The Puritans

of the infant colony were not sorry to see the return of spring, after the sad events of the terrible winter through which they had just passed. Famine, cold, hardship of all sorts had decreased their number by more than one half; but the faith which had sustained them in England and Holland supported them now in their sufferings, and spring found them all looking forward with hope to the new life of liberty that was before them. Among the Pilgrims was Miles Standish, a weather-beaten veteran of the Continental wars. He was a short, stout man, bronzed by his many campaigns, quick to anger, and equally quick to repentance. Time had left no marks upon his frame, but his beard was streaked with gray. As he walked up and down in the room of his little cabin, his mind was busy with the past. All his life came before him, like the shifting scenes of a panorama—his boyhood, with its attachments and friendships and the scenes of his early days; the stirring life of the soldier, the long marches and campaigns without fire or food, and the desperately contested battles. Then he reviewed the tedious voyage of the *Mayflower*, and the hardships of the winter—a particularly sad one for him, for in it his wife, Rosa Standish, had died. His life, deprived of her sympathy and comfort, was doubly cheerless and depressing. Around him were the implements of his profession—his sword, musket, and armor, polished and ready for use, as they had been at all times during his career as a soldier. His friend, John Alden, was near him. A greater contrast could not be imagined than was presented by these two men. Alden was young, slender, and handsome, a true type of the beauty of young English manhood. He was the youngest man of the colony, and on account of his gentle ways and the superior excellence of his manly qualities, was a general favorite. The captain loved him as he might have loved an only son. Alden had been present in the hour of his trial, and was now his support and comfort. As the young man was busy writing the letters that were to go by the *Mayflower* to anxious friends in England, his mind was busily engaged in forming its plans for the future. Life to him seemed far more beautiful than to the captain, for often in the winter he had met Priscilla at the bedside of the sick and the dying, and as they had endeavored to relieve the common suffering, their sympathy and friendship had given place to love—so that to-day his letters seemed to echo the name of Priscilla, and constantly to sing her praises.

**Suitable Subjects for Amplification.**—Short poems often afford the best exercises for amplification; and many examples may be taken from Longfellow, Whittier, Saxe, and

other poets. Saxe is especially valuable, because his works furnish a large number of humorous selections. While children have an excellent sense and appreciation of humor, they often find much difficulty in expressing it.

**Paraphrase.** — A paraphrase is useful in assisting the pupil to get the meaning of the author. It is a translation of the thoughts of an author from his language into our own. The value of paraphrase is often a negative one, but it will sometimes serve to emphasize the choice of right words and the value of clearness and proper arrangement. Select a sentence of Macaulay, Burke, or Webster, and have the pupils paraphrase it as a means of calling attention to the strength of the sentence itself. Poems may be paraphrased to illustrate the difference between the language of poetry and that of prose. In such exercises the pupils should not use the poetic forms.

**Letter Writing.** — With such preliminary work as the foregoing should be associated letter writing. At the present time this is said to be one of the lost arts. Letter writing for its own sake has fallen into disuse, in a very large measure. The principal object of correspondence in this day of the phonograph and the typewriter seems to be to condense information into the smallest space and with the least possible expenditure of time; and, generally speaking, letters are written now for information, rather than for pleasure, and oftentimes with a bluntness, directness, and scant courtesy which cause them to read more like legal notices or billposters than like communications between people living in a cultured age.

The preponderance of letter writing is in the nature of business correspondence; and the principal requisites for the communications of the commercial world are, of course, clearness and directness, with a sufficient expression of facts and circumstances and of their relation to each other.

The personal letter is of an entirely different sort. It is rather a conversation committed to paper, designed to inter-

est or amuse the writer's friends. Details of personal experience, unimportant matters—anything, in short, which might form the subject of a conversation, goes to make up the matter of such a communication.

**Letter Writing in an Earlier Age.**—In a former day the art of elegant letter writing was an accomplishment, which was pursued with a diligence and care that are surprising to us. Ponderous volumes of epistles were written and studied for the sole purpose of inculcating elegance of diction and propriety of subject-matter in personal correspondence between friends. The formality of the old-time correspondence between members of the same family is amusing to the present age. The studied expressions of sympathy in affliction seem cold and formal, and the display of sentiment mawkish. Many old-time models of letter writing are now obsolete, and would be undesirable in their influence upon the taste and style of the rising generation.

**The Origin of the English Novel.**—To the mania for letter writing was due the origin of the English novel. Samuel Richardson (1689–1761), who is accounted first in the order of English novelists, was a writer of letters designed as models for persons of culture. His published letters were supposititious, and were assumed to represent almost all possible occasions which might call out a written communication from a friend. The idea occurred to him that the letters would be more interesting if they were correlated, so that, instead of having to invent a separate fiction to account for each communication, he could arrange for an entire series of letters, taken together, to form a story in themselves. This idea was put into execution; and as successive publications of Richardson's letters were issued from the press, the public interest was greatly excited in anticipation of the outcome. The once absorbing story of *Pamela*, which was written in this singular manner, is to us at the present day an exceedingly tiresome mass of composition, and is but little read.

**Models of Letter Writing.** — It must not be assumed, however, that there are no old models of epistolary correspondence which will prove of service at the present time. There are a number of books of letters written by masters of style in various languages, which contain valuable suggestions to the letter writer of to-day. Among the most famous letter writers of English literature were the poet Cowper, Lady Mary Wortley Montagu, Mrs. Chapone, and William Makepeace Thackeray. The letters of Cowper are still read with interest, and are valuable for their simplicity and naturalness, as well as for their frankness and tenderness. Thackeray's letters abound in graphic descriptions and humorous incidents. The letters of Benjamin Franklin, James Russell Lowell, John Lothrop Motley, and other American authors are well worth reading. Of the ancient classic models, the letters of Cicero are greatly admired. These are often read as exercises in the translation of Latin prose.

**A Remarkable Book of Letters.** — One of the most marvelous of recent books is Andrew Lang's *Letters to Dead Authors*. In a number of these "letters" the author of the volume addresses the dead author in the style of the latter, mimicking every feature of his style — every idiosyncrasy and personal trait — with a fidelity that is irresistibly humorous. For a study of style, the student of literature will find the volume helpful as well as amusing, since it will aid him in noting the peculiarities of various authors. The letters to Byron and Pope are especially available for this purpose.

**Cautions Relative to Letter Writing.** — In the exercises of supposititious correspondence by pupils, care should be taken to discriminate clearly between business communications, letters to chance acquaintances, and communications to familiar and dear friends, and members of the same family. Injudicious letter writing by young persons is very often a cause of much mortification and pain. The proprieties of personal correspondence should be carefully inculcated and always insisted upon.

It is not unlikely that the demands of the commercial world at the present time may result in a return to something of the old-time interest in letter writing—though in such a case the models to be followed will be very different from those of the older day. Certainly a teacher of the present time will fail grossly in his duty if he shall wholly neglect so important an exercise as letter writing by pupils.

**Subjects for Supposititious Business Correspondence.**—Among the topics for business correspondence which may be written with profit by pupils in the schools are the following:

Supposititious answers to genuine advertisements in the daily papers for clerks, business correspondents, agents, etc.

Supposititious orders for merchandise of various descriptions, addressed to real dealers, and containing specific instructions as to shipment or delivery, mode of payment, etc.

Supposititious requests for catalogues, information concerning the price and quality of goods, etc., addressed to merchants.

Supposititious requests relating to salary, addressed to business employers, and giving reasons for the same.

Supposititious requests for favors or indulgences, such as absence from the office or store, relief from certain forms of work, etc., addressed to business employers, and stating the reasons for the requests, together with any offers that may be made in consideration of their being granted.

Supposititious acknowledgments of merchandise received in accordance with previous orders.

Supposititious letters of resignation or withdrawal from business engagements, stating reasons therefor, and providing for all the equities in the case.

Supposititious offers of goods or lands for sale, stating facts in reference to the same, and setting forth the terms offered and the conditions required.

The number of subjects for such correspondence may be increased indefinitely, though of course it cannot be expected that they will provide for every contingency of business letter writing. The most that exercises of this character can do is to inculcate a few general principles to be followed.

**Subjects for Supposititious Letters of Friendship.** — The field of friendly correspondence is inexhaustible. If precision, directness, and brevity are essentials in business correspondence, the claims of propriety (varying with all the degrees of intimacy and with all the varied relations which one individual sustains to another in the social world) and of courtesy are not less exacting. Generally the school is supposed to have more to do with business correspondence than with the correspondence of friendship; yet time may be profitably spent in exercises of the latter class. Among the subjects suitable for supposititious personal correspondence are the following:

Invitations to various entertainments given at home.

Acknowledgments of invitations.

Apologies for acts of carelessness or neglect.

The acceptance of apologies.

A letter from a country boy to a city friend, describing the amusements or employment of the former.

A letter from a city boy to a country friend, describing the amusements or employment of the former.

A letter descriptive of a journey.

A letter descriptive of some building.

A letter descriptive of a village.

A letter to accompany a present.

A letter in acknowledgment of a present.

A letter of sympathy and cheer to a friend who is ill.

A letter of consolation and encouragement to one who has lost a business situation.

A letter to a friend about to enter college.

A letter from a boy at college to friends at home.

A letter requesting advice as to a choice of books for reading.

A letter requesting the loan of a book or other article, stating how it is to be sent, and when it will be returned.

**Composition Proper.** — The subjects for compositions should be assigned some time before the finished work is required, so that the pupils may have opportunity to think about the matter and consult different references



they may need. The outline should be commenced very soon after the subject is assigned. One topic will suggest another, and often a pupil will have more material than he can use. In such cases, if the outline shows signs of careful work and each topic represents a portion of the pupil's real knowledge, it is sometimes well to divide the subject, making two or more separate exercises. The pupil will then feel that the work has been completed, that it represents fully his knowledge, and is in itself a reward commensurate with the time and labor expended. Notes should be made upon all of the topics of the outline, the matter for these notes being taken from various authorities. Then the outline and notes should be carefully studied, until the subject takes a connected form in the pupil's mind. This study should be continued until complete familiarity with the subject is assured. By this time, all dread of the composition will have been removed, and the pupil should write as naturally as he would talk. Furthermore, he will have acquired an interest in the subject, and will be likely to remember what he has studied and written.

**Biographical Sketches.** — For many reasons, the historical or biographical sketch is well suited to beginners in the work of composition. There is a definite beginning and ending, while the order of the narrative is fixed by the character of the subject. Associated with the principal story are many others of great interest and value, so that the work of composition may be extended, if thought best, to any degree of completeness. The biographical sketch leads directly to criticism, from which it is in many cases inseparable. Opportunities for abstract and amplification occur frequently, as certain phases of the subject interest or attract the pupil. The theme is an ideal means of fixing the subject of history upon the minds of the pupils. No matter how thoroughly history may be studied, it will be clearly better comprehended and adjusted if it be made the subject for a composition.

**A Sketch of Charles Dickens.**—Following are the essential facts in the life of the great English novelist. They are such that any pupil having access to a library can procure without difficulty. If suitable reference books upon the subject are not at hand, the teacher can generally supply such material as this:

**PERIOD OF HIS LIFE.**—Charles Dickens was born at Landport, England, Feb. 7, 1812, and died at Gadshill, June 9, 1870.

**HIS FAMILY.**—His father was a clerk in the navy pay office; was transferred to Chatham in 1816, where he resided until 1821. The family removed to London, where misfortune befell them, and the father, John Dickens, was imprisoned for debt, 1822.

**HIS BOYHOOD.**—The family life at Chatham was the happiest period of Dickens' life. Here he attended a school kept by William Giles, and proved to be an apt, intelligent pupil. In his boyhood he was a great reader. He said of himself that he was "a reader from a mere baby, an actor always." Among the books read were the works of Fielding, Smollett, and Cervantes, and the *Arabian Nights*.

With the failing fortunes of the family, came hard times for the boy. He was placed in Jonathan Warren's blacking warehouse at Hungerford Stairs, where his principal work was to paste labels on the blacking boxes. When the family prospects grew brighter, he was again placed at school, this time at the Wellington House Academy. Some of the features of the school are described in the story of Salem House. A club was formed among the boys to circulate the stories written by him while in school, and he was the center of an admiring group, such as surrounded young Walter Scott in the yard of the Edinburgh High School. After about three years of this kind of life, it became necessary for him to earn his own living, and he became a clerk to a solicitor at Gray's Inn.

**EARLY MANHOOD.** — When about seventeen years of age, Dickens determined to become a Parliamentary reporter, a profession that his father had then adopted. His determination and strength of will now became fully apparent. He set himself resolutely at work to learn shorthand; and feeling the need of general reading, became a constant attendant at the British Museum. In 1828 he became a reporter in Doctors' Commons, fell in love with Dora, whom he did not marry, and afterwards almost ridiculed as Flora in *Little Dorrit*. In 1831 he became a reporter for Parliament, and in 1834 he was engaged as a member of the staff of the *Morning Chronicle*. His experiences were much the same as those of the reporter of to-day. He often transcribed his notes upon papers resting on the palm of his hand, by the light of a dark lantern, while the post chaise went as fast as four horses could pull it. He was upset (as he himself tells us) in every variety of vehicle known to the country.

**HIS LIFE AS AN AUTHOR.** — From 1833 to 1835 a monthly magazine published ten articles, some of which afterward reappeared in *Sketches by Boz*. These sketches were first printed in the *Evening Chronicle*, and when published in book form, Dickens received one hundred and fifty pounds for the copyright. In 1836 he was fairly on the road to fame and fortune. *The Pickwick Papers* had become the talk of England. In February, 1837, *Bentley's Magazine* contained the opening chapters of *Oliver Twist*. The first number of *Nicholas Nickleby* appeared in 1835, soon to be followed by the *Old Curiosity Shop* and *Barnaby Rudge*. In 1842 Dickens made his first visit to America. *Dombey and Son* was begun in 1846, *Bleak House* in 1847, and *David Copperfield* in 1849. *Bleak House* began to appear in 1852, followed by *Hard Times* in 1854, and by *Little Dorrit* in 1855. In 1857 Dickens purchased the house on Gadshill, which he had so often regarded with awe as a child, and where in later life he was loved and revered by the country people who surrounded him.

LATER YEARS OF HIS LIFE. — Dickens' public readings were in constant demand, and the income from them was very large; but the extra work was one of the causes of the failure of his health. In 1859 *All the Year Round* was started, in which the *Tale of Two Cities* and *Great Expectations* appeared. A fearful railway accident, in which Dickens was not personally hurt, gave an intense shock to his nervous system. In 1866 he revisited America, lecturing and reading in many places, and receiving an enthusiastic welcome. He returned to England in May, 1867. *The Mystery of Edwin Drood* was begun in 1870. On the 30th of May, Dickens returned to Gadshill, and resumed the work on his book. He worked both morning and afternoon of the 8th of June, completing the sixth installment. Coming into the house after his work, his condition appeared so alarming that he was urged to lie down. "Yes, on the ground," was the reply, and he fell to the floor. He died at ten minutes past six, P.M., on the 9th of June, 1870.

The foregoing outline is intended to give simply the framework for a biographical sketch of Dickens. The lives of few British authors are more interesting than his. All the experiences of life in its varied phases were familiar to him. His sympathy was so great that nothing ever failed to reach or to touch him. His works present many topics which are suitable subjects for school compositions. Among these are the boyhood of David Copperfield, the schools and schoolmasters of Dickens' works, reforms suggested by Dickens' works, etc. Among the critical authorities for the study of Dickens are the following:

Forster's *Life of Dickens*.

Ward's *Life of Dickens* (*English Men of Letters*).

Field's *Yesterdays with Authors*.

*Atlantic Monthly*, vol. 38, p. 474.

*Contemporary Review*, vol. 10, p. 203.

*Living Age*, vol. 100, p. 707.

*London Quarterly Review*, vol. 35, p. 265.

*Fortnightly Review*, vol. 17, p. 141.

*Fraser's Magazine*, vol. 21, p. 381.

*Anecdote Biographies of Thackeray and Dickens.*

**Subjects for Biographical Sketches.** — Of American authors, the following will be found excellent subjects for essays :

Benjamin Franklin . . . . .	(1706-1790).
Washington Irving . . . . .	(1783-1859).
James Fenimore Cooper . . . . .	(1789-1851).
William Cullen Bryant . . . . .	(1794-1878).
Nathaniel Hawthorne . . . . .	(1804-1864).
James Russell Lowell . . . . .	(1819-1891).
Oliver Wendell Holmes . . . . .	(1809-1894).
John Greenleaf Whittier . . . . .	(1807-1892).
John Lothrop Motley . . . . .	(1814-1877).
George Bancroft . . . . .	(1800-1891).
Francis Parkman . . . . .	(1823-1893).
Edgar Allan Poe . . . . .	(1809-1849).
Walt Whitman . . . . .	(1819-1892).
Henry D. Thoreau . . . . .	(1817-1862).
Ralph Waldo Emerson . . . . .	(1803-1882).
Henry Wadsworth Longfellow . . . . .	(1807-1882).

Of British authors, the following will be suitable subjects :

William Shakespeare . . . . .	(1564-1616).
John Milton . . . . .	(1608-1674).
Francis Bacon . . . . .	(1561-1626).
Joseph Addison . . . . .	(1672-1719).
Alexander Pope . . . . .	(1688-1744).
Samuel Johnson . . . . .	(1709-1784).
Robert Burns . . . . .	(1759-1796).
Oliver Goldsmith . . . . .	(1728-1774).
Sir Walter Scott . . . . .	(1771-1832).
William Wordsworth . . . . .	(1770-1850).
Samuel Taylor Coleridge . . . . .	(1772-1834).
Lord Byron . . . . .	(1788-1824).
Thomas Moore . . . . .	(1780-1852).
Alfred Tennyson . . . . .	(1809-1892).
"George Eliot" . . . . .	(1819-1880).

Of American statesmen, the various Presidents of the United States are familiar and suitable topics for biographical sketches. Among other noted Americans whose lives offer suitable themes for school essays, are the following:

Daniel Webster . . . . .	(1782-1852).
Henry Clay . . . . .	(1777-1852).
John C. Calhoun . . . . .	(1782-1850).
Charles Sumner . . . . .	(1811-1874).
Horace Mann . . . . .	(1796-1859).
John Marshall . . . . .	(1755-1835).
Stephen A. Douglas . . . . .	(1813-1861).
James G. Blaine . . . . .	(1830-1893).
Robert Fulton . . . . .	(1765-1815).
Eli Whitney . . . . .	(1765-1825).
Sam Houston . . . . .	(1793-1863).
Winfield Scott . . . . .	(1786-1866).

Among British statesmen, the following may be mentioned in this connection:

John Hampden . . . . .	(1594-1643).
William Pitt (Lord Chatham) . . . . .	(1708-1778).
Lord John Russell . . . . .	(1792-1878).
William Wilberforce . . . . .	(1759-1833).
Richard Cobden . . . . .	(1804-1865).
John Bright . . . . .	(1811-1889).
Lord Salisbury . . . . .	(1830- ).
William Ewart Gladstone . . . . .	(1809- ).

Among other noted men of Great Britain, the following may be taken as subjects for compositions:

James Watt . . . . .	(1736-1819).
George Stephenson . . . . .	(1781-1848).
Sir Richard Arkwright . . . . .	(1732-1792).
"The Man of Ross" (see Pope's Third Epistle, <i>Moral Essays</i> ) . . . . .	(1664-1754).
Sir Isaac Newton . . . . .	(1642-1727).
John Howard . . . . .	(1726-1790).

**The Historical Essay.**—This form of composition is in many ways more difficult to direct than the simple biogra-

phy, since it involves the consideration of many persons, the entire setting of the story, and the description of the people engaged, their motives, their conduct, and the present or remote results of their actions. The method of treatment is the same. The subject is to be studied until the relative importance of the events is determined, their proper relations are ascertained, and their chronology is fixed. It is common to arrange events in the order of time, but the order of importance will sometimes give a clearer idea of the subject. The treatment of any historical event falls naturally into three parts—the causes, the event itself, and its results. Very often the causes and results are of more importance than the event. Let us take, for example, the conflict known in America as the French and Indian war. An outline for an essay on the subject will include the following topics:

<i>The Causes</i>	{	External, The Seven Years' war. Immediate, The struggle of England and France for the New World.						
<i>The Situation</i>	{	The location and the relative strength of the opposing forces at the outset.						
<i>The Events</i>	{	<table> <tr> <td>The war in the North</td><td>{</td><td>Niagara. Ticonderoga. Crown Point. Kingston. Quebec.</td></tr> <tr> <td>The war in the West</td><td>{</td><td>Braddock's expedition. The second expedition to Fort Duquesne.</td></tr> </table>	The war in the North	{	Niagara. Ticonderoga. Crown Point. Kingston. Quebec.	The war in the West	{	Braddock's expedition. The second expedition to Fort Duquesne.
The war in the North	{	Niagara. Ticonderoga. Crown Point. Kingston. Quebec.						
The war in the West	{	Braddock's expedition. The second expedition to Fort Duquesne.						

Much material for brief essays on these topics will be found in the school text-books of history. The pupil should be encouraged, however, to make a broader study of his subject and to make use, not only of history, but also of geography, poetry, biography, and legend, in order to render his portrayal more complete.

It is desirable for pupils to undertake something in the way of original investigation, preparing essays upon themes less hackneyed. Often interesting topics will be found which have not been developed to any considerable extent by writers of history, and which present a field which is wholly or largely new. Let the pupil write the history of his county, his township, or his town or city. If these subjects have been previously developed by other writers, let him take for his subject the military history of his county or State. He can ascertain from official sources what part, if any, was taken by his State in the Mexican war and the war of the Secession; the number of the regiments, and the manner in which they were designated; the total number of soldiers furnished, how they were recruited, and the manner in which they were equipped; notable events in which they participated, etc. If the history, civil and military, of the State, county, and town or city, has been written until the subject has become threadbare, there is still scope for original historical work in recording the annals of the neighborhood.

At the time of the Centennial Exposition, President Grant issued a proclamation in which he requested that the local history of the various civil divisions be carefully prepared and published by local writers, and filed among the archives of the counties, for future use. This very excellent suggestion was acted upon in all parts of the country, and probably much of the work was performed by teachers and pupils of the schools. It would be well if more attention were paid at all times to our local history.

Returning to the more common subjects of history, there is room for a considerable exercise of originality in the grouping and comparison of events and individuals, and the tracing out of historical causes and effects. Thus in a single essay may be presented the three great compromises of Henry Clay; the four Vice Presidents who succeeded to the presidency of the United States; the Federal and Confederate Constitutions, compared; the successive additions to



the original territory of the United States; the origin, rise, and final overthrow of slavery in our nation; the emancipators of modern history — President Guerrero of Mexico, Alexander II of Russia, Dom Pedro II of Brazil, and President Lincoln of the United States; the triumph of the principle of national union over the influences for disunion in the United States, Italy, and Germany, etc.

For an illustration of the tracing of the relation of historical events, one to another, the student of history will note how rapidly the antislavery sentiment in the United States developed from the passage of the Kansas-Nebraska act; how this act was a result of the compromise of 1850, which left open to slavery territory which had been previously free; and how the argument for the preservation of freedom *already possessed* by the territory acquired from Mexico had its origin in the fact that President Guerrero had made the territory free. The emancipation thus begun in Mexico offered the strongest argument against the system of slavery in the Southwest; and this argument grew in strength and power until it found expression in the principle of the Wilmot proviso, which principle became the leading policy of the Republican party, and led to the triumph of that political organization.

**Descriptive Composition.** — Success in description depends upon the ability to observe and to describe the features which separate and distinguish one subject from another of the same kind. A study of objects that are similar or are intimately related, with a view to finding out their differences, will be found valuable in preliminary work. Passages may be chosen from Ruskin, Dickens, Macaulay, Scott, or from other masters of descriptive prose. These may be explained and discussed in class, the teacher showing how the different elements of character or components of a picture may be variously emphasized to produce different effects. The arrangement of sketches will depend upon the effect desired, and the readers for whom they are

intended. The Bay of Naples, for instance, has afforded material for various kinds of description. One writer portrays the natural beauty of the bay and the surrounding country, taken together; another, the view from the land or from the sea; another pictures the bay in the light of history, making note of leading events that have occurred there. The essential of successful descriptive writing is thorough acquaintance with the subject, obtained, if possible, by personal contact. Pupils should fully understand this, and should write chiefly about things with which they are familiar — such as places which they frequently visit, or their own homes and surroundings.

Essays upon subjects relating to geography have been noted in a previous chapter. Papers relating to local geography may be included under the head of descriptive composition. Natural features of the vicinity of the school, such as bodies of water, islands, waterfalls, hills, etc., will supply excellent subjects for school compositions.

The following are some topics for descriptive themes:

Wild flowers.  
A country mill.  
A country store.  
A village street.  
A crowded corner in a city.  
Sunset in the country.  
The woods in autumn.  
The woods in spring.  
A lake.  
An island.  
A cave.  
A rock.  
A hill.  
A brickyard.  
An old church.  
A cemetery.  
An old-fashioned fireplace.  
A well sweep.  
A curbed well.

A garret.  
An old chest or trunk, and its contents.  
An old spoon, dish, or other family heirloom.  
The old-time daguerreotype.  
An old engraving.  
An old-fashioned clock.  
An old sword or cane.  
Street cries and incidents.  
Waiting for a train.  
Household employments.  
A ford in a river.  
A rainy Saturday.  
A wayside inn.  
A country bridge.  
Experiences in a street car.  
The history of a scrapbook.  
Peculiar fashions in dress.

Winter evenings.	The postoffice.
My first fish.	The school building.
Dolls and playthings.	The courthouse.
An old almanac.	The jail.
A scrap bag and its contents.	A wheelbarrow.
A carpenter's chest of tools.	A compass.
A blacksmith shop and its furnishings.	A day in a park.
A cooper shop.	A picnic.
	A skating party.

**Compositions in Fiction.** — Nearly all the various forms of composition may properly make a part of fiction. True descriptions of places and things, and facts of history, are often woven together in imaginative compositions. Fiction is a history or description of the ideal. Its purpose may be to amuse, to instruct, to illustrate the facts of history, or to make us intimate with all the phases of a certain form of life or character through which we may draw our own conclusions. Sometimes the plot or outline of the story is constructed first, with great elaboration of detail; again, certain characters meet and act upon each other according to their natures, and thus the plot grows with the development of the story.

The test of romance writing is not that it be true, but that it be possible and consistent. This principle should be the guiding one in the formation of the plot. After the plot is constructed, the situation or setting of the story should be determined—for upon this its successful development will depend. When all these questions are settled, the action of the story may begin. The writer should show the traits of the characters by their action and by their conversation, rather than by narrative. The story should go forward constantly, gradually rising in interest to its climax, and then should stop.

For beginners, the subject should be simple and well known. The plot should not contain too many incidents, or any feature that is clearly impossible.

Here are some subjects for simple fiction:

How John lost his situation.  
Mary's patchwork quilt.  
Disobedience punished.  
How Charles went to college.  
Minnie's savings bank.  
A wreck at sea.  
A pocketbook found.  
How Tommy caught a burglar.  
A tiger hunt.  
What was found when the mill pond was drained.  
How Frank helped his father.  
A monkey's tricks.  
My first trip to sea.  
How James was saved from drowning.  
The story of a lost key.  
A wonderful dream.  
Honesty rewarded.  
A legend of a good little boy.

The following miscellaneous subjects for compositions may be found available for essays by the more advanced pupils:

The uses of steam and electricity.  
The influence of poetry.  
Ancient and modern warfare.  
Horatius at the bridge.  
Imagination in science.  
The wit and humor of Lamb, Sheridan, and Smith.  
Is oratory declining?  
Famous emperors of Germany.  
The habit of travel.  
The art of printing.  
The Puritan Sabbath.  
Ancient and modern modes of travel.  
Advertisements.  
Moral and physical courage.  
My favorite books.  
Civil service reform.  
The humble origin of great men.  
Free libraries.

Peculiarities of English spelling.  
 The schools of our grandfathers.  
 Adversity's sweet milk, philosophy.  
 "Every mill man's apparel fits your thief."  
 "Misery acquaints a man with strange bedfellows."  
 "Cowards die many times before their deaths:  
 The valiant never taste of death but once."  
 "The breach of custom is breach of all."  
 "The evil that men do lives after them :  
 The good is oft interred with their bones."  
 The legends of King Arthur.  
 The court of Charlemagne.  
 A deserted village.  
 The Roman Forum.  
 The boyhood of great men.  
 An English gentleman of the old school.  
 The games of old England.

The subjects mentioned in this chapter have been suggested as examples rather than with the idea of presenting anything like an exhaustive list of good subjects for composition. Each teacher is the best judge of what is proper for his class. In many cases the subjects will be found to require more time than the pupil has at his command, and more than average experience and ability. Such subjects should not be chosen. It is much better to have a good, well-written theme upon a trivial subject than shallow, unsatisfactory treatment of a topic however profound.

**The Cultivation of the Taste.** — But little has been said of another purpose of English work — a purpose that must not be forgotten or even momentarily lost from sight — the cultivation of a taste for literature and literary appreciation. This taste and the power of expression often go hand in hand. A pupil will rarely be found who, while able to appreciate what is best in literature and to criticise with discrimination, is yet unable to express himself clearly and intelligently. The pupil should read with a definite idea in view ; with an idea of making himself master of so much of the literature of his own tongue and country as may be

accessible during his school days. The love of reading, once acquired and cultivated, will not leave him, but will brighten many an hour of his future life. A selection of books for reading should be a part of the course for every school year, and should be made out for four, six, or eight years, so that the books may be carefully graded. The materials available for such an arrangement are good, and are improving every year. The leading publishers have now in their lists many volumes of selected English classics, newly edited for the special use of teachers and pupils; and more are constantly added. It is only by some such plan as the foregoing that the love of literature can be acquired, and that the true history of literature can be learned. For literature is not a thing of names and dates, but is alive with the full, rich blood of a nation in its veins. It is the mouthpiece of the priest, the prophet, the orator, and the sage; a means of culture without which we may, indeed, be rich and prosperous, and think ourselves happy, and yet without which we will not be content. It is a means of general advancement in thought and ideas, and hence in life.

## CHAPTER X

### SCHOOL EXHIBITIONS

**The Old-time School Exhibition.** — In a clever sketch of old seminary days, Mary Gay Humphreys has depicted "Professor Smith" as a type of the seminary principal. To the last, the old "professor" is proud of his school entertainments, to which he adverts in his reminiscences.

"Why, sir," he exclaims, "my exhibitions were the events of the year. Ette, here, and all the girls used to come and dress the church with cedars and colored paper wreaths. Every candlestick in the town was ours for the asking; and we had all the girls' finery we wanted. They were only too proud to lend it. And as for the people, every hitching post had two or three horses tied to it. All the country people came, and the First Presbyterian church would be filled cram jam, and the rest of the world would look in at the windows. Ette [calling to his wife], what would Mr. Higgins have thought if he could have heard Horace Morton declaim Pollok's description of hell:

Wide was the place, and deep as wide,  
And perilous as deep;

or Smith Kephart, in a long, black cloak and tartan cap and feather, give *Lochiel's Warning*? Ah, that was grand! And there was Angus Liggett, in my niece Antoinette's balzarine dress, and with his hands chained, reciting *The Maniac* until there wasn't a dry eye in the house. Exhibitions! There's nothing like them nowadays."

The old school exhibition, in which all grades were blended and participated, is largely a thing of the past. In the modern graded school the grades are separated; their public exercises, which occur generally in their own grade rooms, are illustrative of the school work, and are appropriate to the respective grades. The old-time exhibition was a something apart from the work of the school—to which it bore little or no relation. Generally it was held in a church or public hall. It was always a great event for the entertainment of the community in which the school was situated. As for the school itself, its sole object was supposed to be the hearing of prepared recitations. Unfortunately, this idea yet obtains in some parts of the country, and seems destined to a still longer life.

Even under the old system, the “spelling bee” and the literary society flourished, and questions of statecraft and criticism were settled in debate, while the school exhibition was a crowning glory. However crude these institutions may have been, they at least showed an appreciation of the fact that practice is the principal factor of perfection, and of the further fact that education has its social as well as its scholarly side. The principle involved is a vital one; and instead of being lost from sight in the changed conditions now prevalent in education, it should be constantly recognized and cultivated.

**School Life and Sentiment.** — The social life of a school is a strong, healthy influence, which will contribute more and more to the education that cannot be reduced to books and recitations. It is rather a result than an accessory of the school—an effect which is produced by many causes.

It has always seemed to me that not enough stress has been laid upon school *life* in our public school management and direction. A boy in England goes to one of the half dozen great grammar schools, and finds himself surrounded by the traditions and examples of centuries. One school has been famous for football, another for cricket. In this



seat some chancellor once sat; here a great novelist told stories to his fellows; on the playground, a famous general won his first battles. The spirit of the former classes and former scholars pervades the school, or the influence of some great teacher rests, like a blessing and benediction, upon the class room and the playground.

We are almost entirely excluded from these local traditions and influences by the nature of our schools and by their want of age; but there are many things that might be done here at present to promote a similar feeling of local character and unity. The school is not a mere auxiliary force in civilization. It is one of the greatest, most prominent agents at work in the shaping of our national growth. Why, then, should it be confined to a dreary, dull routine, lacking form and vitality, unity and strength? Why should it comprise so many apparently antagonistic ideas, when all might be unity and harmony? It is difficult for the individual teachers to determine and direct the policy of a school. Changes of teachers are made so frequently that generally no one teacher has the time to affect a school permanently with his own individuality. A settled system or policy is rarely found, and more rarely carried out with any uniformity. A change of school board often means an entire change in policy and management.

Under these conditions it is almost impossible to preserve and foster the *esprit de corps* that would make the school a unit. It is incontestable, however, that such a spirit must exist in order to attain the greatest success with any body of individuals, either children or adults; while it is equally true that what the school does *as a school*, not as individual pupils or as teacher and pupils, will tend to produce and increase this feeling.

**Commemorative Exercises of the School.** — For these reasons it is advisable to give as much time as can be spared to special exercises and celebrations of various kinds. These may be planned in such a way that they will interfere but little with

the regular work of the school, by assigning different parts of the exercises to different divisions of the pupils. The work will perhaps fall most heavily on the teacher, and on this account it should be systematized and divided as much as possible. All departments of work should receive such attention as may emphasize, in turn, their value as a means of profitable recreation.

Pericles, in his famous funeral oration, says: "For the whole earth is a sepulcher of famous men. Not only are they commemorated by columns and inscriptions in their own country, but in foreign lands there dwells also an unwritten memorial of them, graven not on stone, but in the hearts of men." Not only that the great men of our nation may live in the hearts of the present generation, but that their influence shall widen and deepen as it passes from us to our children, it is fitting that we allow no convenient occasion to escape, in which we may refer to their lives and words or profit by their examples.

"In the schools," says Robert M. King, "the celebration of certain days may involve no real loss to the school work, but only a pleasing change in its form. An alternation of different forms of labor is always restful, and may be very profitable. Often the school celebration affords an opportunity for the particular form of training which the pupil most needs. The exercises of the celebration or observance may be of various length, sometimes taking the place of a single recitation, and at other times lasting through several class periods."

In King's *School Interests and Duties*, to which this book is a companion volume, the subject of school celebrations and observances is presented at some length, and suggestions are made relative to the celebration of the birthdays of American authors and statesmen, and the observance, as "flag days," of dates associated with great and memorable events. In the same volume is presented an interesting and very profitable observance of Arbor day by schools of

both the city and the country. Unlike the heterogeneous exercises of the former school exhibition, these celebrations and observances are strictly pertinent and auxiliary to the regular work of the school, and, taken altogether, are so frequent as to form an integral part of the school life. Their principal purpose is not the entertainment of the public, but the cultivation of the pupils. Such adaptations of the school programme to special occasions give character to schools, and are in accordance with the best thought of the present day in education. They add immeasurably to the pupil's range of information, while quickening the perceptions and developing the sentiments of patriotism and of love for all that is best in our national life.

**Exercises for Friday Afternoons.**—Besides the celebrations of authors' birthdays and of days notable in American history, exercises of a purely literary and oratorical character are of sufficient importance to be held, generally, once in a week. Friday afternoon is an appropriate time; for then the regular work seems most to lag and the interest to be dulled. There need be little fear of the encroachment of Friday afternoon exercises upon the time rightfully belonging to other work. The encroachment, if any there be, is generally from the other side. The selections to be spoken or read on Friday afternoons by pupils of the lower grades need not be long. It is far better for a pupil to learn a single paragraph or sentence and speak it well, than to commit to memory an entire poem or speech, with little or no conception of its true expression. The teacher may not have the time or opportunity to perfect each individual pupil in a separate and extended recitation of prose or poetry; but it will require but little time to inculcate in each the proper rendering of a paragraph or two. Sometimes the roll call on Friday afternoons may be dispensed with, the pupils choosing, from a basket or box, cards containing numbers, and then rising at their seats, in turn, as their respective numbers are reached, and reciting some

suitable selection. This plan sometimes conduces to ease of manner and to attention. The pupil is to note for himself his place in the order of the recitations, rising to speak when his number is reached. Other plans may be followed, and it is desirable that there be variety in both the matter and the manner of these exercises.

Besides these exercises of and for the pupils of the school, a programme more extended and diversified may be prepared every two or three months, to which the public may be invited. The open "reception day" will add greatly to the interest of the pupils and to the effectiveness of the exercises. As in the case of everything else that is done in school work, the performance must be well done. The programme must be attractive and interesting. No one should ever go away from a meeting of this kind without a feeling of something gained for himself, or of pride in the work and success of the pupils. The exercises should be suited to the grades of the pupils. The work of selection and arrangement should be commenced early, so that every part may be thoroughly studied and comprehended before the time of reception day.

**General Exhibitions of the School.** — In addition to these attractive features of school life, there are still occasions for school exhibitions of a more general character, and having less immediate connection with the school work in history, literature, and science. Often these are oratorical or dramatic or musical or spectacular, or all these combined. In the larger institutions of learning they are generally conducted by societies of students, capable of devising and managing such entertainments independently. In the smaller schools of villages and of country districts they are under the direction of the teacher, and include the pupils of various grades, recalling the best features of old seminary exhibitions, but with the advantage of improved training discernible throughout.

**Elocution as a Factor in Public Exercises.** — In Bardeen's clever story of *Roderick Hume*, the young schoolmaster is

questioned as to his ability to teach elocution. He answers:

"I can teach that it is a humbug; at least, as usually understood and practiced."

Far from being a humbug, elocution should be rationally and successfully taught in its essential principles in every school. It should be taught without affectation, and with perfect naturalness. It is a mistake of many teachers of elocution that they make of it a distinct study, instead of inculcating it at all times; they ignore and neglect its practical application to the general reading and speaking in school recitations. If the teacher be careless and slovenly in his vocalization, he cannot expect his pupils to observe the principles of elocution. If he says "pensle" for *pencil*, "Lat'n" for *Latin*, "mounh'n" for *mountain*, "flawr" for *floor*, "wuz" for *was*, etc., his pupils, unless they have exceptional advantages of home training, will be apt to fall into the same errors.

Another common fault of teachers of elocution is that they attempt too much. They sometimes select some exceedingly difficult composition for the display of the elocutionary powers of their pupils. Poe's *Raven*, and *Bells*, and *Hamlet's Soliloquy* are often chosen for the training of beginners, who would better be giving the true expression to the old dialogue of the *First Reader*:

"Ned, can you hop?"

"Yes, I can hop. Can you hop, Tom?"

It will be generally conceded that the basis of true elocution is a thorough understanding of the subject, and a perfect naturalness of manner. Let a person *feel* what he is about to say, and there is little doubt that he will say it effectively. Effective speaking is not rant, as many professional elocutionists, by their recitations, might lead us to infer; neither is it an awkward stiffness of manner and of speech which comes of a poor understanding of the subject or of too great self-consciousness. Every one who remem-

bers the *Hamlet* of Edwin Booth, or who has seen the *Joan of Arc* of Sara Bernhardt, will understand what is meant by thorough appreciation of the subject, by complete mastery of the thought and feeling, and, consequently, of the speech of the character which the speaker is for the time assuming. The essential of intonation and gesture is truth to nature; but intonation and gesture are merely incidental to the development of the thought. Animated speech always produces many and varied inflections and changes of tone, and finds its expression in gesture also; but these are secondary, and, in the original character, spontaneous. The person reciting will be successful in proportion as he recognizes this fact and makes the thought and feeling the source of the variations in expression.

**How to study a Selection.**—In studying a selection for the first time, the pupil should read it over very slowly and very carefully, trying to find out the full meaning and force of each word, and entering as completely as possible into the spirit of the author. Then it should be read aloud, still very slowly, the pupil endeavoring to bring out all the meaning of the selection, and repeating the reading until he fully understands the ideas that the author intended to convey. When this has been done, the appropriate gestures and intonations may be added, and questions of articulation, pronunciation, rhetorical pauses, and emphasis settled. The practice should be continued until the piece is thoroughly mastered.

The acting of Charles Dickens in the chapters he read from *The Mystery of Edwin Drood*, in all probability, has never been surpassed on the English stage; and no elocutionist can express the humor of Mark Twain or the pathos of James Whitcomb Riley, as they themselves portray it. The characters are the personal creations of the author; and he enters fully into their sentiments and feelings, for they are a part of his own life and thought. So the person who would actually and accurately represent the thoughts,

words, and actions of another must make them a part of himself. The study of elocution should by no means be neglected, neither should its value be underestimated; but it is not possible for every one to obtain instruction in this subject from specialists, and teachers must look to some other means to supply the deficiency.

The ability to express properly and adequately the thoughts of others is within the reach of every one who will endeavor with patience and industry to find out what the author means, and, afterward, to render it with the same feeling that he would have were he the author.

Short and simple exercises in vocal rendering are much better adapted than long poems or speeches to the needs of young pupils, and of all who have not learned the elements of true elocution.

Character reading is often well rendered by children. Illustrative scraps of conversation from the characters of Dickens<sup>1</sup> will be found highly entertaining and profitable for the purpose.

**Recitations.**—The recitation, or “reading” (independently of the book), is one of the most popular forms of literary entertainment. Sometimes the reading may be “in character,” the reader wearing a costume appropriate to the subject. Where there is a monologue, or soliloquy, this gives a highly dramatic effect to the selection. Literature is filled with poetry and prose suited to purposes of school recitations. Ordinarily simple descriptive poems are best suited to young pupils. Selections portraying a degree of passion require careful training for their proper presentation. Such are valuable as tests of the pupil’s power of expression.

Where pupils display a natural aptitude for elocution and are trained in it without affectation, the more difficult

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<sup>1</sup> The *Dickens Dictionary* contains brief descriptions of the characters which have made the name of Charles Dickens immortal. It presents, also, many of their most noted and characteristic sayings.

renderings may be given with propriety. Poe's *Raven*, with its strong, subjective passion and its romantic effects of scenic description, has been mentioned; also his *Bells*, which admits of a singular variety of intonation, descriptive of the "tintinnabulation," "ringing," "tolling," "rolling," "throbbing," "sobbing," etc., of bells, and illustrative also of the emotions which these sounds awaken in the human heart.

Jean Ingelow's *Brides of Enderby*, another poem, offers scope for elocutionary effects in the calling of the cows, and in the quaint description of the tragedy of the high tide in ancient (British) Boston. Lover's *Shamus O'Brien*, and Boyesen's *Brier-Rose* have retained their popularity as elocutionary compositions, but are rather long for ordinary purposes. *Hamlet's Soliloquy* is a famous test of skill in rendition, and there are various other soliloquies in the works of Shakespeare, Sheridan, and other dramatists, which will answer a similar purpose. Dryden's *Alexander's Feast*, which may be recited with an accompaniment of suitable instrumental music, is a marvel of poetic power and inspiration. Ossian's *Carrie-Thura* may be recited as a monologue, accompanied at times with the harp in the hands of the reciter.

Tennyson's *Dream of Fair Women* may be rendered with an accompaniment of tableaux, representing the personages described. *Locksley Hall*, by the same author, is the expression of a young man's passion, and has been an inspiration to a generation of British and American readers. *Locksley Hall Sixty Years After* expresses the altered views and changed feelings of a very aged man, as he sees with disappointment the tendencies of the age. The latter poem is not popular in America. The two are companion pieces, suitable for extended recitations in character, but too long for ordinary purposes of school entertainments.

Mrs. Browning's *Cry of the Children* and Cowper's *Grave* are poems of deep feeling. Hood's *Song of the Shirt* is similar in character to the former of these. Longfellow's *Morituri Salutamus*, the voice of an old man speaking to a



rising generation, is in strong contrast to the despondency of *Locksley Hall Sixty Years After*.

T. Buchanan Read's poem of *Sheridan's Ride*, and Robert Browning's *Ride from Ghent to Aix*, are less difficult than most of the foregoing, but are fine tests of elocutionary powers. Trowbridge's *Vagabonds*, Whittier's *Barbara Frietchie*, Tennyson's *May Queen*, Carleton's *Chicago Fire*, and other old-time favorites continue to please.

Of the lighter forms of poetry for recitations of some length, Saxe's *Travesties* — *Orpheus and Eurydice*, *Ulysses and Polyphemus*, *Pyramus and Thisbe*, etc., — together with Robert Browning's *Pied Piper of Hamelin*, Bret Harte's *Heathen Chinee*, and various humorous poems by Carleton and others, have been favorites for a long time. James Whitcomb Riley's dialect poems contain an almost inexhaustible store of the humorous and the pathetic.

**Recitations from the Classics.** — Sometimes recitations in other languages than ours are appropriate to public entertainments. A descriptive recitation may be taken from Homer's *Iliad* or from Vergil's *Æneid*. Of the former of these classic masterpieces, the lament of Andromache on parting from Hector is one of the most beautiful and touching passages found in all the realm of literature, and is a favorite of all Greek scholars. A selection of thirty-three lines (lines 407 to 439 of Book VI of the *Iliad*) containing this scene may be rendered by a student of Greek, and is especially appropriate as a recitation for a young lady. A selection of similar interest and passion, portraying the last scene in the life of the unfortunate Queen Dido, is contained in lines 584 to 705 of Book IV of the *Æneid*. This passage may be shortened somewhat by a skillful elimination of some of the paragraphs.

Many of the Greek odes of Anacreon are very simple, and may be easily set to music. Some of these might be rendered as songs, with an accompaniment of a stringed instrument.

Various odes of Horace may be recited with fine effect. The *Second Ode* of the First Book is descriptive, and will suggest a variety of intonations and of gestures. The *Twelfth Ode* of the First Book was chanted at the burial of President Garfield, and is associated with various historical events of a similar character. The *Ninth Ode* of the Third Book of Horace is properly a dialogue, and represents a very pretty little lovers' quarrel, which may be acted with fine effect by a boy and a girl.

Abridgments of Latin or Greek plays, or single scenes selected from them, will sometimes supply excellent dialogues for production in character on the school stage.

For the student of Vergil, a very beautiful recitation is found in Tennyson's *Ode on the Nineteenth Centenary of Vergil's Death*. From it are taken the following lines, which may serve to introduce a recitation from the *Æneid*:

Light among the vanished ages ; star that gildest yet this phantom  
shore ;  
Golden branch amid the shadows, kings and realms that pass to rise  
no more ;  
Now thy Forum roars no longer ; fallen every purple Cæsar's dome —  
Tho' thine ocean-roll of rhythm sound forever of Imperial Rome —  
Now the Rome of slaves hath perished, and the Rome of freemen  
holds her place ;  
I, from out the Northern Island, sundered once from all the human  
race,  
I salute thee, Mantovano, I that loved thee since my day began,  
Wielder of the stateliest measure ever molded by the lips of man.

**Recitations in German and French.** — Students of German will have access to a variety of ballads and short descriptive poems in that language. Bürger's *Lenore*, while too long for most purposes of the sort contemplated, is one of the best selections for vocal rendering in the German language. Goethe's *Erkönig* (Erl-king), Heine's *Lorelei*, and Schiller's *Der Taucher* (the diver) are favorite classics for recitations in German.

Victor Hugo's *Djinns* is a marvelous short poem in French, describing a storm at night, and filled with the subjective passion of a superstitious soul. The lines increase gradually in length (from two syllables to ten) and in power as the storm approaches, and they grow shorter and smoother from the crisis to the close. The meeting of Athalie and Joas, in Racine's French tragedy of *Athalie*, is a much admired selection, suitable as a dialogue for a young lady and a boy. Molière's French comedies are filled with amusing scenes and "situations."

**Declamations and Orations.** — In an earlier period our national literature was largely oratorical. Before the day of the universal reading of daily newspapers in the centers of population, far more importance was attached to the spoken addresses of political orators than now. Every schoolhouse echoed the eloquence of leaders of thought in the Republic. We were a nation of declaimers. The declamation has fallen somewhat into disuse in later decades, but is worthy of revival. The best thoughts of American statesmen crowded the pages of old-time books of eloquence, and are still to be found in large measure in school readers, as well as in books of elocution and oratory.<sup>1</sup> It is well to cultivate the art of public speaking by reproducing the orations and public addresses of our statesmen, and the teacher or pupil will not lack for material. Such study is a valuable preparation for the composition and delivery of original orations. The latter are among the highest forms of composition, and offer to the more advanced students a valuable field for advancement.

The successful orator must be a good judge of human nature. He must win the sympathy and favor of his audience before he can bring them to his way of thinking, and he must

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<sup>1</sup> Of books of declamations, orations, and recitations there is no lack. Most books of elocution contain selections for practice in the rendering of such compositions. There are, besides, a large number of cheap pamphlet publications, such as the *One Hundred Choice Selections* series, De Witt's *Choice Selections*, Beadle's *Speakers*, Dick's *Recitations*, etc.

respect their opinions, prejudices, and desires. The reported speech of Mark Antony after Cæsar's assassination is a remarkable example of the manner in which a mob may be won over by skillful speech. Antony had every reason to fear that his own life was in danger. The man who had loaded him with favors, and whose political schemes he had assisted, had been slain for attempting or desiring to make himself king—in which Antony had aided him. Brutus and Cassius had defended the murder before the people, and had been supported, for the name of king was odious to the Romans. Antony alone sought to turn the current of public opinion back to his dead friend. He began by referring to his right to speak at Cæsar's funeral under leave of Brutus and the rest.

"He was my friend, faithful and just to me," he said of Cæsar; and as Cæsar's friend he had come to pay the last honor to the memory of that hero. These words could not but appeal favorably to the Romans, for it was at once an evidence of boldness and of faithfulness. The orator then alluded with the greatest art to some of Cæsar's victories, and to the benefits which the victor had conferred upon the Romans. By repeated change from innocent and inoffensive statements to bitter irony he branded Cæsar's assassins as cowards, traitors, ingrates, and murderers, while he carefully emphasized his respect for them in a mockery of words. Thus he led the excitement on and on until it became a burst of popular fury.

Some speeches of Mirabeau and Danton, those of Burke in the trial of Warren Hastings, and some pleas of famous American lawyers, are equally good examples of what an orator may do when he enters into the feelings of the people and appeals to them for support. Cicero was unable to obtain a hearing for one of his greatest speeches—that in behalf of Milo—partly because he was immeasurably above his audience and could not easily bring them into full sympathy with himself.

**Dialogues.**—If there are to be dialogues, they should be well chosen, and illustrative of character. Often it is found better to select a single scene or part of a scene from some classic drama, than to choose commonplace dialogues from unknown authors or from writers of little merit.

The old-time school readers contained many dialogues of great merit, largely taken from old plays, some of which have been forgotten. Not infrequently it happens that a drama which, considered as a whole, is not a success, contains some scene that is worthy to live, though the rest be discarded; and thus there are to be found, even in the compositions which have dropped out of literature, passages which none are willing to let die. The writers of books of oratory sometimes make it a point to reproduce these fragments, and it is well that they do. There are many who lament that these have disappeared from the later readers, which present, instead, the standard literature as recognized by the critics of the present day. In the old-time school dialogue there is often much of sententiousness, of point, of moral force to recommend it; and it is an excellent plan to draw upon such material for the dialogues of school entertainments.

Among the dialogues which entertained the school patrons of an earlier decade are the following:

<i>Glenalvon and Norval</i> . . . . .	John Home.
<i>Lochiel's Warning</i> . . . . .	Thomas Campbell.
<i>Gil Blas and the Old Archbishop</i> . . . . .	Adapted from Le Sage.
<i>Pizarro and Gomez</i> . . . . .	Von Kotzebue.
<i>Varroc's Patriotism</i> . . . . .	Ambrose Phillips.
<i>Ennui</i> . . . . .	Charles Mathews.
<i>Alexander and the Robber</i> . . . . .	John Aikin.
<i>The Colonists</i> . . . . .	John Aikin.
<i>Old Fickle and Tristram</i> . . . . .	William Allingham.
<i>Mohammed and Alcanor</i> . . . . .	Samuel Miller.
<i>Leaving School</i> . . . . .	Mrs. L. C. Tuthill.
<i>The Soft Answer</i> . . . . .	T. S. Arthur.
<i>Dionysius, Damon, and Pythias</i> . . . . .	Archbishop Fénelon.

<i>Cato's Senate</i> . . . . .	Joseph Addison.
<i>The Old Man's House</i> . . . . .	Robert Southey.
<i>Elmira and Gonzales</i> . . . . .	Felicia D. Hemans.
<i>William Tell</i> . . . . .	Sheridan Knowles.
<i>Nobility</i> . . . . .	Maria Edgeworth.
<i>The Doctor</i> . . . . .	Henry Fielding.
<i>The Frenzy of Orra</i> . . . . .	James Baillie.
<i>Balthazar and Volante</i> . . . . .	John Tobin.
<i>Catiline and Cicero</i> . . . . .	George Croly.
<i>Rienzi</i> . . . . .	Mary R. Mitford.
<i>The Saracen Brothers</i> . . . . .	Nathaniel Lee.
<i>Brutus and Titus</i> . . . . .	Nathaniel Lee.
<i>Unjust Prejudices</i> . . . . .	John Aikin.
<i>The Teacher and His Pupils</i> . . . . .	John Aikin.
<i>The Choice of Occupation</i> . . . . .	William Osborne.

There is little or no humor in such dialogues as these. As the student of literature will note, some of them are taken from old dramas. For the most part, they are sentimental and oratorical, and were designed to impress some moral lesson. In a reaction from performances so sober as the rendering of these, recourse was had to the merry dramas of the English Restoration. When purged of their indelicacy, the roaring comedies of Farquhar, Wycherly, Congreve, and Vanbrugh supplied scenes for production on the school stage. The sharpers, swindlers, fops, stupid servants, and other exaggerated types of English life in the days of Charles II furnished amusement, certainly, but still were foreign to American life. A preference was felt for American school dialogues by new writers, whether distinguished in the field of literature or not. A large number of cheap books of dialogues,<sup>1</sup> of various degrees of merit, have been

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<sup>1</sup> Among the books available for supplying dialogues suitable to the use of graded schools are the following: *Choice Dialogues for School and Social Entertainments*, by Mrs. J. W. Shoemaker; *Fenno's Favorites* (fifty dialogues), by Frank H. Fenno; *De Witt's School Dialogues* (12mos), *Children's Dialogues*, *Little Dialogues for Little People*, and *Pieces and Dialogues for Our Darlings*, Beadle's *Dime Dialogue Books*, Dick's *Dialogues*, etc. The plays of Shakespeare constitute an inexhaustible supply from which dialogues may be taken.

published to meet the demands of the school stage, as distinguished from the legitimate drama.

There are in these, and in other books of like nature, dialogues of all descriptions, adapted to pupils of all grades. Care should be exercised in the selection. Only the interesting and suitable should be chosen — those possessing point and obvious purpose. Humor is a desirable feature, if it can be used legitimately and profitably. The well-written dialogue of a sentimental character is to be commended, however, both for its influence upon character, and for the training in pure expression which it affords.

The drama has been variously regarded in the moral world. The English drama began in the Church, and was devised by the priests, as a means of religious instruction. There yet remain, in some out-of-the-way nooks of Europe, periodical dramatic representations of a religious character, such as the miracle play of Oberammergau, in Bavaria. The Puritans closed the theaters, considering the drama as essentially sinful, whatever its form. With the restoration of the monarchy, succeeding the Commonwealth, came the corrupt drama, which was unquestionably bad. In our own time there are those who cannot look with complacency upon any dramatic entertainment, but their number is growing less. In many schools dramatic representations are regarded as a valuable form of art, and sometimes complete and representative dramas are produced by students, with a high degree of success. In various colleges the classic dramas of the Greeks and Romans are produced in the original languages, to the delight of all lovers of ancient art. For most school purposes, single scenes or acts from the English drama<sup>1</sup> are found sufficient.

**The Stage, Scenery, etc.** — Where general entertainments of the kind described are given in public halls, a complete

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<sup>1</sup> French's *Standard Dramas* will be found to contain a great variety of plays of various description and quality, including the best works of master writers in the dramatic field.

stage with all its accessories is generally supplied, and the managers of the entertainment are spared any care and trouble on this account. Sometimes, however, it becomes necessary to improvise a stage, or, at least, its appliances. Elaborate appointments are not necessary. Frequently a little ingenuity in the arrangement of the furniture and decorations will meet the requirements for the stage setting. In case it be desirable to procure a few scenes for the background of plays or dialogues, these can be obtained generally at a small expense from the publishers of plays and from dealers in theatrical properties.

**Tableaux.** — The *tableau vivant*, or living picture, was more popular formerly than at present. Objection is made that the care necessary to its production is out of proportion to the satisfaction derived, since the tableau is viewed for so very short a period of time. However, tableaux are almost the only means for portraying upon the school stage the figures of classic mythology, and frequently they are advantageously employed to depict striking scenes in history and literature.

There was something of a revival of the tableau in the United States in the Columbian year. As a means of raising money to provide for the school exhibits at the Columbian Exposition, thousands of schools gave entertainments in which scenes of American history were depicted in tableaux, generally with a high degree of success and satisfaction.

For historical tableaux there is an unlimited field. In many instances these may be based upon notable paintings, as, for instance, those famous works of art in the Capitol at Washington, which represent, respectively, the landing of Columbus, the Pilgrims, the discovery of the Mississippi, etc.

Various striking scenes in the life of Washington, and pictures of the Revolutionary period, were especially popular in the Columbian year. Pictures of old colony life in New



England and Virginia were also frequently presented. Tableaux of American history generally are understood and appreciated by the audience.

A modification of the tableau may be found in the stage chorus. The personages of the tableau may retain their position in the background and along the sides of the stage, while a song is rendered as a solo or duet, and all can join in the chorus, with suitable expression and action. The tableau chorus may sing the entire song, if this be preferred.

Mythological characters have been popular as subjects for tableaux, and also for floats in the spectacular celebrations of Mardi gras in various cities of Europe and America. The draped figures in numerous works of art offer suggestions as to topics of this character. The mythology of the Greeks and Romans, the Norse, the Persians, the Hindus, and the American Indians is available for a class of schools in which these subjects are familiar. For the most part, they would be generally deemed inappropriate for the more elementary schools. Any good work on mythology will suggest suitable topics for such representations.

**Music for School Exhibitions.** — The nature and the selection of musical compositions to be rendered must vary with the different circumstances of the schools. Choruses by the school or class, together with solos, duets, or quartets by pupils qualified to render them, add much to the interest and pleasure of the occasion. Patriotic songs are always appropriate, and the national songs of other lands are often rendered with fine effect. Instrumental music may be accompanied by calisthenic exercises of various kinds, and by marches of the smaller pupils, if any such participate in the programme.

**Exercises for Small Pupils.** — Throughout this chapter have been considered chiefly the exercises suitable for students of high schools and academies, and for pupils of the more advanced classes in the ungraded schools. In a

general exhibition, however, it is often found desirable to have various grades, including the smaller pupils, represented. In such cases it is better to assign to the latter an early place on the programme. For the most part, the various performances described — readings, recitations, dialogues, tableaux, and songs — may be adapted to the pupils of the lower grades. Exercise songs and some of the games for little children which are presented in Chapter III of this volume, will be found suitable for incorporation in a programme in which the smaller pupils participate.

## CHAPTER XI

### SCHOOL DEBATES

**The Value of Debates.** — The debating club, to which allusion has been made in a preceding chapter, was an important feature of American seminaries, and often of common schools, in an earlier day. The debate has generally ceased to be the single feature of students' societies, but it still holds an important place in them. There has been, moreover, a tendency in later years to introduce into the school work exercises of this character, as a part of the rhetorical programme; and in very many high schools the practice of extemporaneous speaking of an argumentative character has proved exceedingly valuable in its results. The arguments in favor of this form of school work are such as should claim the attention of every teacher in academic and high school grades, or in the ungraded schools where there are pupils sufficiently advanced to participate in discussions.

However valuable an accomplishment it may be to read well, it is assuredly better to talk well. Whatever may be the influence of the writer, and whatever prominence may be attached to his name and reputation, his present, active influence will be strengthened if he can exert the same abilities and express the same ideas in speech. He will thus reach an audience that may never hear of what he prints — much less read it. In the present day, when the test of a man's life may be made and may be over in the course of half an hour's duration, it is important that every one should be able to impress himself clearly and forcibly.

And aside from the duty of the individual to himself, there is the argument of patriotism and public policy. Is it not a duty that Americans owe to their country to qualify themselves to speak intelligently and with some authority upon the questions of public welfare that are constantly arising? Heaven forbid that we should ever become a nation of mere speakers! But there are times when a judicious, plain, straightforward statement of facts, based upon common sense; will change the current of public opinion, just as there are times which require the highest eloquence and the most persuasive arguments. Thus far, in the history of the United States, the man has been found when the crisis came; and the history of the world's eloquence can show few better examples than might be furnished from the meetings of our statesmen, from the first Congress of the Colonies to the close of the war of the Secession.

Free speech is a characteristic of free government, but speech must be fluent and sensible as well as free. This gift of speech, so essential an element, is doubly necessary in a country made up of so many different classes, often misunderstanding each other, suspecting each other's motives, and permeated with partisan and sectional jealousy. Training in the art of speaking in public is a part of the training for citizenship.

True, there is danger in an excess of the argumentative spirit. It may produce wranglers and hypercritical censors who will call every man to account for every thought and action. There are, however, many questions on which we dare not remain in doubt—where a decision of some sort is necessary. If we accept by prescription the opinions of others, we act blindly, and surrender our own personal independence and responsibility. There is always the desire to find out the truth, simply *because it is the truth*,—a principle which should be first in the life and conduct of every man, and which will naturally lead to the development of the powers of analysis and argument.

There is little danger that the school debate will lead to heated controversy. The amenities of courtesy and respectful discussion, if acquired in the school, will tend to mitigate the asperities of disputes in real life. The pupil who learns to argue without loss of temper and without giving offense will be far better equipped for such controversies as may prove inevitable in his later career.

**Debates in the School.** — Any pupil who is old enough to conduct an intelligent discussion is old enough to learn the courtesies which should characterize it, and to receive suggestions as to the form and arrangement of his argument. School debates may have simple beginnings. A difference of opinion develops in a class upon some point of history, of grammar, of geography, or of arithmetic. The teacher selects two representative pupils having opposite opinions upon the subject, invites each in turn to make a statement of his views. Thus, without formality, a discussion is begun. Perhaps it is deferred until some other period of the day, when more attention can be given to it. After each has expressed his views, others may be invited to participate. Pupils who would be startled at the thought of being called upon to conduct a debate will thus find themselves actually debating, without premeditation or formality.

Sometimes the school debate is begun as a written exercise. Probably this is the better plan for the more advanced pupils. But it is best to encourage as much and as early as possible the oral, natural, and extemporaneous expression of thought.

**Debates for the Older Pupils.** — The debate should have some place in every high school. Where there are well-maintained literary societies in connection with the high school, the more formal and extended debates may be left to these, the debates during school hours being more general in participation, briefer, and more directly related to the studies of the school.

**School Societies.**—Of the value of literary societies of students it is unnecessary to speak at length. The elements of the successful school are not held together merely by school work and schoolroom association. There is generally a feeling of fellowship, of mutual interest and respect, of common purposes and aims, that is carried forward from year to year and becomes as positive an entity as the corps of teachers or the school buildings. Usually this school spirit has its birth in something independent and outside the school itself—in something that the pupils themselves are doing or have done. Naturally, it takes the form of field athletics or of the literary society, the debating club, or all of these. It is not necessary that the membership of the society or club be confined to the school itself. It may be extended to include all who are interested in work of the character contemplated.

**The Organization of a School Society.**—The organization of a society should be strong and regular from the first. It should be properly officered, and should have adequate rules of membership and procedure, with stated times of meeting, regularly prepared programmes, and, above all, some means of securing regularity in the performances.

For a simple organization the officers should be the president, vice president, secretary, treasurer, and the programme committee, and these should hold office long enough for each to become familiar with the duties of his office.

In the organization of a society, and subsequently, it is well to devote some careful attention to the study of parliamentary law or the rules for the conducting of public assemblies. The position of the presiding officer is one requiring tact, skill, consideration, quick judgment, and unfailing courtesy. The secretary should keep full, accurate minutes of the proceedings, including the subjects of the debates, the names of the debaters and of the judges, the decisions rendered, and any other facts of interest which are worthy of preservation.

**The Constitution.** — The constitution of a society is a written instrument stating its purpose, the form of its organization, the manner of electing officers and members, and the laws by which it is governed. A constitution is generally introduced by a preamble, which states the purpose of the society. The subjects included in the constitution are then treated under separate articles, and each sub-head is provided for by a division of an article called a section. The following is a common form of constitution :

**THE PREAMBLE.**

**ARTICLE I.** — Name of the Society.

**ARTICLE II.** — Officers.

**ARTICLE III.** — Duties of Officers. A section is devoted to the duties of each of the officers.

**ARTICLE IV.** — Election of Officers.

**ARTICLE V.** — Membership.

**ARTICLE VI.** — Amendments, how made and adopted.

**ARTICLE VII.** — Order of Business.

Under the head of by-laws are included all the rules that affect the time of meetings, the quorum, special meetings, the inauguration of officers and initiation of members, dues, fines, appeals, appointment and duties of committees, and all the general rules of business procedure that pertain to the management of the assembly.

**Order of Business.** — For a debating society the following order of business should be generally followed; for a literary society of a more general character, the entire programme may take the place which is assigned to the debate :

Call to order.

Reading and adoption of the minutes of previous meeting.

Reports of committees.

New and unfinished business.

The debate.

Decision of the judges.

Miscellaneous business.

Adjournment.

If meetings are held every week, it is often better to have the alternate meetings given up to a miscellaneous programme. Such a programme would probably consist of readings or recitations, declamations, essays, and dialogues. A programme which is as informal as possible would be more enjoyable, and may take the form of the discussion of a new book or poem, a newspaper article, or any form of information in which the society will be interested.

A series of questions may be incorporated in the order of business, and a question put to each member separately. The Addisonian Society of New York used the following questions:

1. Have you lately met with anything calculated to interest or improve the society, in history, travels, science, the arts, or other branches of useful knowledge?

2. Do you know of any new and amusing story proper to relate in conversation?

3. Have you any questions for debate to submit for the consideration of the society?

The principal value of such alternate meetings lies in the fact that they bring the members of the society closer together, and do away with much of the formality which must result if the strict adherence to parliamentary rules is observed at all times. If to every member of the society is given a chance to contribute to the pleasure and information of the other members, all will have a feeling of ease which perhaps will be acquired in no other way.

**Motions.**—Subjects for consideration are brought before the meeting by means of motions or of written communications. A motion requires a second. After a sufficient time has been allowed for discussion, the question is “put” to the assembly for vote. Voting is commonly by the ayes and nays, but may be by roll call, each member voting in the affirmative or negative as his name is pronounced by the secretary. A motion can be amended. The amendment in



turn can be amended; but the amendment to an amendment cannot be amended.

**Motions not Debatable.** — There are some motions which do not admit of debate, but must be put to vote as soon as they are made and seconded. These are the calls to order, and the motions :

- To adjourn.
- To close the debate.
- To extend the limits of the debate.
- To read a paper.
- To suspend the rules.
- To take a motion from the table.
- To take up a question out of its proper order.

**Motions not Amendable.** — There are some motions which cannot be amended, but must be voted upon as presented, unless a substitute motion be adopted. These are motions :

- To adjourn (unless to adjourn to a specific time and place).
- To amend an amendment.
- To lay upon the table.
- To postpone indefinitely.
- To reconsider a debatable or undebatable question.
- To suspend the rules.
- To take up a motion from the table.
- To withdraw a motion.

**Motions Requiring a Two-thirds Vote.** — There are some motions which are not decided by the votes of a mere majority, but require a two-thirds vote. Generally included among these are the motions :

- To amend the rules.
- To close the debate.
- To extend the limits of the debate.
- To limit the debate.
- To suspend the rules.
- To take up the question out of its proper order.
- Also the previous question.

**Motions Always in Order.** — There are some motions which are in order, even when there is already a question before the house. These are:

The call to order.

The appeal.

Objection to consideration.

**The Right to the Floor.** — Any member desiring to speak upon a question must rise and address the presiding officer by his title. This officer announces the name of the person rising, who is then said to "have the floor."

The mover of a motion is entitled to the floor if he has not spoken previously, though some one else address the presiding officer first. No one may speak twice upon the same subject when there is some one who has not spoken and addresses the "chair" at the same time. When neither of the foregoing rules apply, it is customary for the Chair to recognize the advocates and opponents of a measure in turn. It is out of order to interrupt a speaker who has the floor for any purpose except for a question of privilege, a call to order, a call for the orders of the day, or an objection to the consideration of the question. ,

**The Point of Order.** — When any member of the assembly notices a breach of order, he may rise and say, "Mr. Speaker, I rise to a point of order." The member who previously has had the floor now takes his seat, and the chairman calls upon the member making the point of order to explain. The Chair decides the point, from which decision an appeal may be taken if it be seconded. The assembly then decides by vote upon the point of order. The majority vote will govern in this case.

**Parliamentary Usage.** — The chairman should insist upon courteous and considerate conduct on the floor of the assembly, and he has the right to expect the assistance of the members of the body in his endeavors. A good manual of parliamentary law and customs should be carefully studied

by all the members of the society — especially by the officers. There will be numerous opportunities for practice in parliamentary usage, and there are few more interesting contests than are furnished by the divisions of a well-drilled assembly, especially when they are almost evenly matched.

**Subjects for Debates.** — For beginners in debate, easy subjects should be chosen — either topics that are very common or those that have a local interest. The subjects should not require the use of many references. Sometimes they may be taken from the regular course of study or of the pupils' reading. Very often the pupils will suggest topics which are of interest to them, and which they ordinarily discuss in conversation — such as the relative value of certain games and sports, or the reason or excuse for certain customs and observances. Among the familiar topics which may be chosen are the comparative value of bicycling and horseback riding; a comparison between the pastimes of fishing and hunting, or between the games of baseball and football. For pupils acquainted with American history, such subjects as the following may be selected:

*Resolved*, That the services of George Washington, as President, were more beneficial to the United States than were those of Abraham Lincoln.

Was Grant a greater general than Lee?

For the more advanced pupils, and for debating societies in general, the subjects should be not only of interest, but also of some weight. They should be sufficiently serious and important to require some labor in the preparation of the debate. Each debate should add materially to the knowledge of the assembly. The subjects selected will vary with the membership of the club. In some societies questions of politics, finance, government, and social movements will predominate; in others art, history, literature, law, and philosophy will be more common. In general, whatever be the subject, a present and practical application should be made of it.

Owing to the peculiar character of debate, and the comparatively short sessions of debating clubs, it is impossible to do more than refer to authorities or make short quotations from them, omitting the literature of the subject, which is often very extensive and interesting.

Occasionally the programme may be varied to include papers, reading from authorities, poems, chapters from novels—anything, in short, that relates directly to the subject in hand, and that will add variety and interest to the debate.

In addition to the selection of the subjects for debate and the general arrangement of the programme, the committee on exercises may prepare a list of the more important and common authorities and references, as an aid to the debaters.

**List of Subjects.**—The subjects for debate are inexhaustible in number. Following is a suggestive list from which topics may be chosen :

Is representative democracy the best form of government ?

Should education be made the basis of suffrage ?

Should there be a property qualification for suffrage ?

*Resolved*, That protection is a wiser, better policy than free trade for the United States.

Are trades unions a benefit to the laboring classes ?

Are business corporations injurious to the welfare of the country ?

Should education in the public schools be compulsory ?

Is the English literature of the Elizabethan era superior to that of the Victorian ?

Should Hawthorne rank higher among American authors than Irving ?

Was Prescott a greater historian than Motley ?

Has the religious progress of the world kept pace with the intellectual progress ?

Is the law more useful to society than medicine ?

Were the great men of ancient times superior to those of modern times ?

Which exerts the deeper influence upon the mind—beauty or power ?

Do the laboring classes have a proportionate share of the blessings of life ?

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Should eight hours be the limit of the working day ?

Should personal property be taxed ?

Has the multiplication of books affected literature favorably or unfavorably ?

Which is the more influential form of literature — fiction or the drama ?

Will America become the leader in the literature of the English language ?

Have women more influence than men in the promotion of morality and religion ?

Which have had the greater influence upon the world — the Jews or the Greeks ?

Which is of the greater importance — the study of history or the study of literature ?

Which will lead men the farther — curiosity or necessity ?

Do newspapers affect general intelligence more than books ?

Is the progress of civilization favorable to poetry ?

Is success in life due more to opportunity or to ability ?

Is learning a greater power in society than wealth ?

Has Germany contributed more to the advancement of Protestant religion than England ?

Was the Mexican war justifiable on the part of the United States ?

Which has done more for civil liberty — England or the United States ?

Was the reign of Louis XIV beneficial to France ?

Did Garrison contribute more than Sumner to the overthrow of slavery ?

Was Clay a greater orator than Webster ?

Should the study of the Bible as a literary study be taken up in the schools ?

Is a man responsible for his belief ?

Will the present form of the British government last as long as the present form of government of the United States ?

Should the government control the telegraph and railway systems ?

Should the cities own their intramural transportation lines, gas works, and waterworks ?

Can civil service reform and municipal management be made effective under the present political system ?

In its influence upon the history of the world, was the battle of Marathon more important than that of Waterloo ?

Should the President of the United States be elected directly by popular vote ?

Is William Morris a greater poet than Swinburne ?

Should the liberty of the press be restricted ?

Have Americans won the most brilliant victories on the land or on the sea ?

Which is of the greatest value in education — the classics, mathematics, or the sciences ? (For three debaters.)

Are outdoor sports as a means of physical development better than the exercises of the gymnasium ?

Is cycling superior to walking as a means of exercise ?

Was the French Revolution justifiable on the part of the people ?

Was the banishment of Napoleon Bonaparte to St. Helena justifiable ?

Is there more to approve than to condemn in the character of Oliver Cromwell ?

Is prosperity favorable to the morals of the nation ?

Has the introduction of machinery been, on the whole, a benefit to the laboring classes ?

Should subjects that may be actually applied in after life be the only subjects taught in schools ?

Would an equalization of property conduce to the happiness of society ?

Is popularity the true test of the merits of a production ?

Should the quantity of land held by one person or corporation be limited ?

Is the coeducation of the sexes the best form of education ?

Is the coeducation of the white and colored children desirable in this country ?

Is a condition of universal peace probable ?

Was there a greater field for eloquence in ancient than in modern times ?

Is a life of leisure desirable ?

Should politics be made a permanent business or profession ?

Do revolutions hinder or advance the cause of civilization ?

Do the present police, jail, and prison systems tend to increase or to decrease crime ?

Which contributes more to success in life — talent or tact ?

Which is the better as a general exercise — Rugby or American football ?

Do the results of the Arctic expeditions justify the cost and loss of life attending them ?

Are the United States a great military power ?

Was Mohammed merely an enthusiast, or was he an impostor ?

Should medical and law schools require the equivalent of a college course for admission?

Has any citizen of the United States a right to be neutral in politics?

**The Relation between Thought and Speech.** — A well-managed debating society furnishes unlimited opportunities for practice in speaking, and as such is a very important adjunct of high schools, academies, and colleges. A further consideration in its favor is found in the relation between thought and speech. Every man must speak as he thinks. If his thought be loose and disconnected, his expression will be the same. It is very desirable, then, at the outset, that all subjects on which we have to speak shall be studied thoroughly, and that our knowledge be so classified and arranged that we may depend on it in the hour of need. When a subject has been once considered, there should be no stop until all its conditions and relations have been mastered. Here, indeed, is the difficulty which confronts the beginner in all kinds of literary work. Understanding the general meaning and scope of a subject is different from being familiar with it. It is the intimate, accurate, comprehensive knowledge that makes the ready writer or speaker. The student should go to the bottom of everything, if possible, so that he will have, not confused ideas, not vague, general impressions, but clear-cut and accurate conceptions. It is true that this is an ideal, but it may become largely a reality if the right methods be followed. While, perhaps, it is impossible for one man to collect in his own mind all the elements of human knowledge upon any one given subject, it is possible for him to see clearly into the rudiments of things if he will be accurate and careful in observation and judgment. In all forms of argument it is the thought that tells. It is the reason to which the appeal must be made which decides the question.

The language in which the thought is expressed should be suited to the subject, and should be, above all, clear and forcible. Pupils should be taught to use good language at

all times, and for all purposes. If children have two vocabularies, they are apt to use one in connection with their comrades and in the ordinary affairs of life, and to reserve the other for important occasions. While the reserve vocabulary may be good as far as it goes, it is generally very limited. Goldsmith once said of Dr. Samuel Johnson, that if the latter were to write a fable about little fishes he would make them talk like great whales. Children often have an idea that large words are necessary to the expression of great ideas, and their composition or speech is likely to become pompous and stupid. The most effective remedy for this fault is constant practice in writing and speaking.

A plan which has been followed by many great speakers is to study carefully a selection from some great author or speaker, and then to attempt a reproduction of it, following the original as closely as possible. This is an excellent way to avoid faults, and it helps materially in the formation of a correct and easy style of expression.

Victor Hugo was in the habit of writing a few pages every day, even when not engaged in any regular work, in order to preserve the facility of expression for which he was so famous.

Henry Clay once remarked: "I owe every success in life to one single fact; namely, that at an early age I commenced and continued for some years the practice of daily reading or speaking the contents of some historical or scientific book. These offhand efforts were sometimes made in a cornfield, sometimes in a forest, and not infrequently in some distant barn with a horse and ox for my only auditors. It is to this early practice that I am indebted for the primary and leading impulses that stimulated my progress and have shaped and molded my destiny."

Sheridan entered Parliament after having achieved success in other walks of life. His first speech was a disappointment to himself and to his friends. He was told that he would be wiser to stick to his former pursuits.



"No," he replied, "it is in me and it shall come out."

And so it did after patient and unremitting work.

Fox said that he became a great debater at the expense of Parliament. For some time after entering the House he used to speak upon almost every subject that came up for discussion, whether he was interested in it or not, and in this way he acquired the experience and facility that made him so noted as a debater.

Perhaps the most famous popular debate in American history was that between Senator Stephen A. Douglas and Abraham Lincoln, in Illinois in 1858. Douglas had everything in his favor, — fame, ease and grace of manner, and practice as a speaker and parliamentarian. Lincoln did not possess those qualities which are necessarily the acquirements of long experience, and his manner was not to be compared with that of Douglas. Yet from the opening of the debate Lincoln's sympathy, his broad humanity, his close contact with the people, his sound sense, his earnestness, his humor, and his pathos went straight to the hearts of his audience. It has been given to few men to speak more nobly, or more effectively than he, or to do more for the general welfare of humanity.

**The Mock Congress.** — As an agreeable change from the usual form of the debating society, a mock congress or a political convention may be organized. If the meeting take the form of a congress, a speaker should be elected, and the leaders of each party should be chosen. The leaders may then select their respective sides, or the members may be divided by lot, after which the different committees are to be appointed. Bills are introduced, amended, referred to committees, and advanced to different readings exactly as in Congress. Subjects for a mock legislation can be selected from those occupying the attention of the National or State governments at the time. Information concerning these topics may be obtained from the papers, and a beneficial interest in public affairs will often result.

**The Mock Convention.** — The mock political convention, or caucus, is much more interesting, but hardly so instructive, as it is at most a game of parliamentary fencing. The society should be as evenly divided as possible, since matters will be much more interesting thus. The usual officers and committees should be appointed. Each party will endeavor by every parliamentary means to prevent its opponents from making nominations. Often, however, the regular society elections will furnish ample opportunities for contests of this sort. So long as the work of the society is not hindered, or its practical purpose defeated, these contests are rather beneficial than otherwise.

**Requisites of a Good Debater.** — He who would become a successful debater must be a person of broad and general knowledge; he must have facts and figures at his tongue's end, and must be well posted in all the principal events of the day. He must keep up with the times in history, in literature, and in art, and he must be familiar with the spirit of the people and of the age in which he lives.

## CHAPTER XII

### EASY EXPERIMENTS IN PHYSICS

**Science Study in the Elementary Schools.** — Among the recommendations of the Committee of Ten in reference to the study of physics, chemistry, and astronomy is the following:

That the study of simple natural phenomena be introduced in the elementary schools; and that this study, so far as practicable, be pursued by means of experiments carried on by the pupil.

An ideal arrangement of courses of study would lead systematically and collaterally from the most elementary to the most advanced presentation of all the subjects that constitute the school course. In a number of branches this plan has been followed very generally; in others, it has been disregarded.

It happens very often that the pupil of the secondary school comes to the subject of physics, or to that of chemistry, botany, or physiology, with no previous training whatever in these branches. The phenomena of life and nature with which he has been in constant contact have little meaning for him. There is no reason for such a delay of elementary instruction in these lines. Elementary studies in botany, physiology, physics, and chemistry may begin with addition in arithmetic, or even with the First Reader. Such studies should be carefully graded, and much pains should be taken in the selection and presentation of the topics, in order that they may be adapted in every case to the grade for which they are intended.

The more elementary *Rollo Books* by Jacob Abbott, which entertained an army of young children in a former generation, presented various subjects in natural science in a manner which placed them within easy comprehension of boys and girls in the elementary schools; and other engaging volumes of similar scope added greatly to the diffusion of scientific knowledge among the children of America. Under the old-time school régime, such books were almost the sole supply of scientific instruction adapted to the comprehension and interest of the younger pupils. The subjects were not presented at all in the schools until the pupil was sufficiently advanced to study in the highest classes a somewhat thorough treatise upon each. Pupils of the public schools who had not access to libraries containing juvenile books of the sort described, and who did not enjoy the luxury of possessing copies of their own, were greatly at a disadvantage; while a child who acquired the elementary principles of various natural sciences from juvenile reading books was deemed somewhat precocious, since natural philosophy, even in its most elementary forms, was held to be a subject suited only to the understanding of persons already well advanced in other studies. The recommendation of the Committee of Ten, which has been quoted, is opportune and commendable.

**The Value of Science Study.**— Apart from the value of a knowledge of the particular branches of science mentioned, there is in the study of science, in general, an element of analysis and investigation, together with an opportunity for individual work, for the discovery of facts personally unknown, and for the application of logical reason and scientific induction, not to be surpassed in any other lines of study. Scientific observation leads to the discovery of causes, scientific deduction to the tracing of effects, and the two combined to the formulation of laws. The laws are the conditions under which given causes produce given effects. Scientific observation must be complete and accu-

rate, and it is in the cultivation of the power of full and accurate observation that the principal value of scientific studies lies. The freezing of water, for instance, is a common phenomenon; but a number of interesting and instructive experiments can be made to show exactly what freezing involves, what changes the water undergoes, and what new properties it assumes.

It is proposed here to present a brief outline of experimental studies in physics, which may be adapted to the use of schools of various grades. The scheme may be extended, amplified, and otherwise varied in many ways.

**Preliminary Definitions.**—To begin with, a few fundamental terms may be given, and the three forms of matter explained and illustrated. Care should be taken that the idea is clearly expressed in the definitions. The following are among the most important of the preliminary definitions:

The *attraction of gravitation* is the name given to the force which causes material bodies to approach each other, when free to move. In the case of terrestrial bodies the name given to this force is *weight*.

The *mass* of a body is the amount of matter in it; and the weight of different quantities of the same thing will vary as the amount of mass.

The amount of space which a body occupies is its *volume*.

By the *density* of a body is meant the nearness together of the particles of matter which the body contains.

The most minute body of matter is called an *atom*. Atoms unite to form *molecules*. No two molecules are in permanent contact, but all are in constant motion. This may be explained by the action of heat on matter, its effect being to drive the molecules farther apart.

The *three states of matter* may be illustrated by means of water in its various forms as a solid, a liquid, and a gas (ice, water, and steam). When the molecules of the ice become further separated, the ice melts and the liquid is formed.

When the molecules of the liquid become further separated, the liquid is converted into steam. True steam is invisible, though the vapor of partially condensed steam is visible as a cloudlike mass. Water occupies smaller space in the form of a liquid than in the form of a gas (steam), because in its liquid form the molecules are closer together; and since the molecules are still closer together in a crystal of the ice, it might be inferred naturally that, on being converted into ice, it would occupy a still smaller space. That it does not, is owing to the fact that the ice crystals are not packed closely together, but are so arranged as to leave many small spaces between them. Following are a few simple experiments illustrative of the principles stated:

**Simple Experiments Illustrative of the Foregoing.**—(1) Partly fill a glass bottle with water. Insert a cork in the mouth of the bottle, and in the cork place a rubber (or, better, glass) tube of some length. Heat the water in the bottle; it will take the form of a gas (steam). The inference is that heat has changed the water from a liquid to a gas. Cool the tube through which the steam passes, and the latter will be condensed into water again.

(2) Place another cork loosely in the neck of the bottle, and heat as before. The cork will be driven from the bottle. The inference is, again, that steam occupies more space than water.

(3) Fill a tumbler half full of water, and insert in it a second tumbler which fits closely. If the water cannot get out, it will be impossible to force the second tumbler into the first. Strike a smart blow with the palm of the hand upon the surface of water; the sensation is much like that caused by striking any other flat surface. Take a common syringe, having a tight-fitting cylinder, fill it with water, and place the nozzle against a surface, so as to prevent the escape of the water. It will be impossible to force the cylinder more than a little way. Water, therefore, has resistance.

(4) Weigh an empty tumbler, then fill it half full of water and weigh it. Water has weight also.

(5) Take a shallow vessel (a large pan, for example) and partly fill it with water. Expose it, so that the water will freeze. Notice how it freezes. Long crystals will be formed, shooting out from the sides of the pan, becoming more and more numerous, until the water is frozen throughout. It has now assumed the third form of matter — a solid. Fill a bottle full of water and cork tightly; then allow the water to freeze. The bottle will be broken. The inference is that water occupies more space as ice than as a liquid; also that ice is lighter than water, and therefore is formed on the surface of streams.

(6) To make crystals of other forms, take two ounces of powdered alum and dissolve it in a teacup half full of boiling water. Suspend from a little splinter, placed across the cup, three or four threads, allowing the ends to hang a little way into the solution. Let the cup stand twenty-four hours, and beautiful crystals will form on the bottom and sides of the cup and on the threads. Crystals of bichromate of potash, blue vitriol, copperas, and other substances may be made, and kept in the school cabinets.

(7) Clean a piece of window glass, warm it, and pour on it a strong solution of sal ammoniac or of saltpetre. Drain off the liquid, and hold the wet glass up to the sunlight, or, better, examine it with a magnifying glass, and watch the formation of the crystals.

(8) Watch the formation of frost on the window panes, or catch snowflakes on a cold yellow glass. Examine them with a magnifying glass, and note the beautifully formed crystals.

(9) Float a small wooden box in water; press downward upon it, and you can feel the resistance of the water. If a paper box be pressed into the water, the sides will be driven in. At sea, empty bottles of thin glass are tightly corked and sunk by means of a heavy weight; at a sufficient depth, the pressure of the water will break the bottles.

(10) Fill a long tube with water; make a hole near the bottom of the tube, and fit in a cork loosely. If the water in the tube be high enough, the pressure will force the cork out. Fit into the hole thus made a smaller tube, bending it so that it will be parallel to the larger. The water will rise to the same height in both tubes. The water supply of towns in a hilly country is often managed in this way: A large pipe of cast iron, called a standpipe, is built upon a hill, so that the level of the water in the pipe shall be above the points to which it is desired to force the water. The pipe is filled by pumping, and the pressure of the column in the standpipe is sufficient to force the water in the mains to the highest point of the service pipes.

An iron ball is sometimes placed in the nozzle of a fountain. The pressure of the water will force the ball up and keep it in motion. In all kinds of water mills, the energy of more or less rapidly moving bodies of water is utilized to do work. The simplest of water wheels is the old-fashioned overshot wheel. It has a series of flat surfaces, upon which the water falls, causing the wheel to move. A small wheel may be made easily by fastening wooden rings, two or three inches apart, upon an axle, then placing flat pieces of wood between them.

(11) Take a glass jar and a cylinder of the same size, if possible. Close one end of the cylinder by tying a piece of sheet rubber over it. Fill both with water, and invert in a vessel filled with water. The water in the jar will not fall; that in the cylinder will fall slightly, and the rubber bottom will be depressed. The water in the glass jar is protected from the weight of the column of air above it by the inflexible bottom.

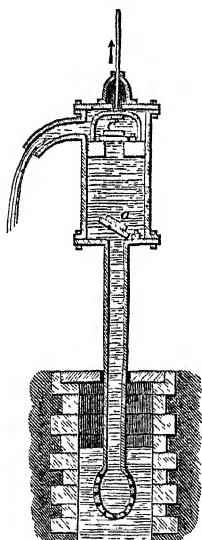
The pressure of the air upon the water in the vessel in which the jars are inverted is sufficient to sustain the column of water in the jar. The water falls slightly in the cylinder because the pressure of the air acts upon the rubber bottom, depressing it.



(12) Fill a glass tube with water, and, closing one end of the tube tightly with the finger, invert it in a vessel of water. The water in the tube does not fall. Take the finger from the top of the tube, and the water at once begins to fall. Why?

(13) Fill a tumbler partly full of water, and place a piece of heavy paper over it. Hold in place with the hand, and invert the tumbler. The water does not fall out. Why not?

(14) Partly fill a bottle with water. Insert a cork tightly in the neck of the bottle, and pass a glass tube, drawn out slightly at one end, and fitting the cork tightly, nearly to the bottom of the bottle. Blow into the bottle, filling it as full of air as possible. When the mouth is removed, the water will be forced up through the tube. The air in the bottle is compressed, and the pressure forces the water out.



**The Principle of the Suction Pump.** — The weight of the air at the sea level is about fifteen pounds to the square inch. Ordinarily this pressure is uniform upon the surface of water. When the pressure is removed from any part of the surface, the pressure upon the remainder of the surface will cause the water to sink there and to rise where the pressure has been removed. In

drawing water to the mouth through a straw, the cavity in the mouth is made larger so as to draw the air from the straw, and the water, owing to the pressure upon its general surface, rises in the cavity thus formed. The working of the ordinary suction pump may be easily explained. It consists essentially of a cylinder and a piston, each containing valves opening upward. When the piston is drawn

up, the air in the cylinder is rarefied, and the water comes up into the cylinder through the valve (*a*) in the bottom.

When the piston is forced down, the valve (*a*) closes by its own weight and the weight of the water above it, the valve (*c*) opens, and the water comes above the piston. As the piston is again raised, the valve (*c*) closes (falls shut); the water escapes by the spout, and the cylinder is filled.

**The Mechanical Powers.** — Boys and girls will find interesting and profitable recreation in testing the appliances known as the mechanical powers, and it would be well if all the ungraded schools were supplied with simple forms of these elements of machinery — the lever, the pulley, the wheel and axle, the inclined plane, the screw, and the wedge.

To these might be added a set of simple pendulums. The explanation of the principle of the mechanical powers should be made by the teacher. It forms a very valuable contribution to general knowledge. Experiments with the appliances may be multiplied by the pupils in the intervals of school work.

Machines are used to gain an intensity or velocity of motion, to change the direction of force, or to employ other forces than our own. A machine can perform no more work than is performed upon it. Indeed, it always performs less. If anything is gained in intensity, it is lost in velocity, distance, or time.

*The power, multiplied by the distance through which it moves, is equal to the weight multiplied by the distance through which it moves.*

Thus a man may move a very heavy weight by a series of compound pulleys, but his strength is exerted for a much longer time than would be necessary to raise the weight a given distance, if the requisite amount of power were at hand.

*The power, multiplied by its velocity, is equal to the weight multiplied by its velocity.*

**The Lever.** — A lever is a rigid bar, free to move about a fixed point called the fulcrum.

Levers are of three classes, according to the positions of the fulcrum, the weight, and the power.

In levers of the first class, the fulcrum is between the weight and the power. Examples are the crowbar, steel-yard, pincers, and scissors.

If the weight is between the power and fulcrum, the lever is of the second class; as, for example, a nutcracker.

If the power is between the weight and the fulcrum, the lever is of the third class. Such are tongs and sheep-shears.

A lever may be easily made by taking a smooth bar of hard wood, dividing it by scale to tenths of an inch, and boring small holes in it, in which to fix the fulcrum. Small bags of shot may be used for weights.

Experiments should be made to verify the laws of the lever.

*If the power arm be twice as long as the weight arm, the power will move twice as fast (or twice as far) as the weight.*

**The Pulley.** — A pulley is a wheel or a combination of wheels turning upon an axis and supporting a cord upon the circumference. The only advantage to be gained by a simple pulley (of one wheel) is that of direction. When a compound pulley (of more wheels than one) is used, intensity is gained at a loss of time or distance. The amount of gain depends upon the number of movable pulleys used, and the manner of application of the weight and power.

When the pulley has a continuous cord, a given power will support as many times its own weight as there are loops of the rope coming back to the wheels of the movable block which bears the weight. Small pulleys may be obtained at any hardware store. The grooves should be smooth, the pulleys should turn easily upon their axles, and the cord should offer as little resistance as possible.

**The Inclined Plane.** — An inclined plane is a smooth, hard, rigid surface inclined to the direction of the force to be overcome. When the power is applied in the direction of the plane, it will support as many times its own weight as the number of times the height of the plane is contained in its length. When the power is applied parallel to the base of the plane, it will support as many times its own weight as the times the vertical height of the plane is contained in its horizontal base.

In verifying these laws, iron or lead balls may be used (both for power and for weight), and a cord that will offer the least resistance.

**The Wheel and Axle.** — The wheel and axle is a modified lever, consisting of a cylinder and wheel united so that they may turn together. The power is applied to the wheel to gain intensity of power at a loss of velocity, or time at the expense of power. A windlass is a very common example. The general law of machines will apply as follows:

*The power, multiplied by the distance through which the power passes at one revolution of the wheel, is equal to the weight multiplied by the distance through which the weight passes in one revolution of the axle.*

A fairly ingenious boy will find no difficulty in constructing all the simple machines.

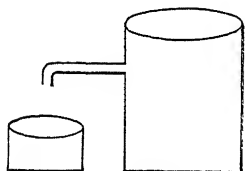
**The Screw.** — The screw is a cylinder with a spiral ridge upon it, called a thread, that works into a corresponding groove in the nut. A common letterpress or ciderpress is a good example. Power is generally applied by means of a lever, and at each turn of the lever the screw advances the distance between the threads. This machine gives great intensity of power with a great loss of velocity.

A large bolt may be made to answer for the screw. In verifying the laws of machines, spring balances are necessary. These may be procured of any dealer in physical apparatus, while very satisfactory results may be obtained

from the balances that can be bought at any hardware store. These will indicate the amount of power applied.

**The Law of Floating Bodies.**—The story of Archimedes and the alleged golden crown of King Hiero<sup>1</sup> will tempt many a boy to make experiments similar to the one narrated. The principle upon which the story rests is, that *a floating body displaces its own weight of liquid*; or, in other words, it will sink into a liquid until it displaces a weight of the liquid equal to its own.

(15) Obtain a vessel of any kind, provided with a spout, as in the figure. The axis of the spout should be nearly perpendicular to the side of the vessel. Fill the vessel until it overflows. When the overflow has stopped, place under the spout a vessel that has been previously weighed; now weigh in air a block of wood or of ice, and place it in the water. An overflow will follow. Weigh the water that has been caught in the second vessel. Its weight will be found to be the same as the weight of the block in air. Perform the same experiment with lighter and heavier substances, and note the results.



From this law it follows that anything will float that is lighter than the bulk of water displaced. This explains why the modern man-of-war, constructed almost entirely of iron, will float.

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<sup>1</sup> According to Vitruvius (a Roman architect and writer who served under Julius Cæsar), King Hiero, of Sicily, suspected that his crown of gold had been alloyed by a fraud of his jeweler, and asked the philosopher Archimedes to ascertain if this were true. As Archimedes threw himself into his bath tub, one day, the water ran over (since the tub was full), and he at once reflected that his body had displaced an equal bulk of water. By immersing the crown in water, and measuring the bulk of the fluid displaced, and by weighing the same bulk of pure gold, he was able to determine, when the alloyed crown was weighed, how much it lacked of the requisite weight of pure gold. When the plan first dawned upon his mind, he rushed from the bath tub, exclaiming in Greek, "*Eureka!*" (I have found it).

**Heat.** — While heat is not a form of matter, as was once supposed, but rather a form of molecular vibration, we are apt to speak of it as though it were a substance of itself. A variety of simple and interesting experiments may be made, illustrative of the phenomena of heat. Among these are the following:

(16) Fasten a number of wires upon a board, like the spokes of a wheel. These wires should be of different metals, as iron, copper, brass, German silver, etc. Place a lamp flame where the wires meet. After a few moments, run the fingers along the wires from the outside ends towards the flame. Note the difference in the rapidity with which the various wires conduct the heat. Make a table showing the relative conductivity of the wires.

(17) Place a short, lighted candle in an ordinary milk pan at one side of the center. Cover the pan with a large cardboard, fitted as tightly as possible to the edge of the pan. Immediately over the candle there should be a number of small holes in a circle in the cardboard, and a similar circle near the other side of the pan. Place a lamp chimney over each of these circles. Hold a piece of smoking paper over the lamp chimney farthest from the candle; the smoke will be drawn down through the chimney, through the pan, and out by way of the other chimney, by the force of the draft which the lighted candle causes.

(18) Take a lamp chimney, a saucer, and a short piece of candle. Pour a little water into the saucer, and set the lighted candle in the middle. Place the chimney over the candle; in a few minutes it will be extinguished. Place a cardboard partition in the chimney, and relight the candle; it will continue burning. If a piece of smoking paper is held at one side of the chimney, it will be seen that there is a current of air down one side and up the other. These experiments illustrate the principles of ventilation.

(19) Fasten a glass tube tightly in a bottle. Invert the tube, and place it in a vessel of colored water. Now heat

the bottle, and bubbles will pass through the water, showing that the air has been expanded by the heat, and has sought an outlet through the water. If the heat is removed, the pressure of the air on the water in the vessel will force it part way up the tube. The air is rarer than before the heat was applied.

(20) Take a test tube, partly filled with ether, and place it in a vessel of water at a temperature of  $60^{\circ}\text{C}$ . The ether will boil. The inference is that ether boils at a lower temperature than water.

(21) Partly fill a thin glass flask with water, and heat the flask until the water boils. While it is boiling, cork the flask tightly. Invert the flask, and pour cold water on it. The water will boil violently, the air in the flask having been driven out by the steam. The steam is condensed by the application of cold water, leaving a partial vacuum in the flask. Does water boil at a lower temperature in a vacuum than in the air? Why? Pour hot water on the flask. Note the result, and explain it.

(22) Water may be changed slowly into a vapor. The process is called *evaporation*. Wet a block of wood, and place it on a watch crystal half filled with ether. By means of a small bellows or a fan, cause the ether to evaporate rapidly. The crystal will be frozen to the block of wood.

(23) Pour ether on the bulb of a thermometer and, by the same means as above, cause the ether to evaporate. The mercury will fall. Both experiments show that evaporation is a cooling process. Extreme cold and pressure are used to liquefy gases, as carbonic acid gas or ammonia. When they are liberated they return to the form of a gas, absorbing a large amount of heat in so doing. This fact is made use of in the manufacture of artificial ice.

(24) To illustrate the process of distillation, take a glass flask and fix in the mouth of it a glass tube, bent downward so that the water formed by the condensation of the steam may flow away. Have this tube pass through another, so

that cold water may be in constant circulation about the delivery tube. Place a solution of salt and water in the flask, and heat slightly above the boiling point of water,  $212^{\circ}$  F. The water will be vaporized; the salt will remain. The vapor of water, passing through the cooled delivery tube, will be condensed again. Explain the process of distillation, as used for commercial purposes.

(25) Take two parts, by weight, of Glauber's salt, and dissolve in one part by weight of hot water; cover the solution with a thin layer of oil and allow it to cool, keeping it perfectly quiet. When the solution has cooled to the surrounding temperature, plunge a thermometer into it. Crystallization will begin at once, and the temperature will rise. Explain it.

Certain metals (iron and bismuth are examples) contract by cooling to a certain point, and then expand—a phenomenon that we have noticed in the formation of ice. These metals are used for making castings. Others (as lead and gold) do not expand at the moment of solidification, and have to be stamped or carved.

**Sound.**—Following are a few simple experiments illustrative of the phenomena of sound:

(26) Stretch two fine cords between two supports, and add weights to each until they vibrate in unison. Then place little paper riders, made by bending a small piece of paper thus (shaped  $\Lambda$ ), upon one of the strings. Set the other string in motion. The riders will be thrown off, showing that the vibration of one string produces a corresponding vibration in the other. Try the same experiment when the strings are not in unison, and carefully note the results.

(27) Fix a bridge one fourth the distance from the end of the string. Place paper riders at intervals on the longer segment, and set the string to vibrating by touching the shorter segment. The riders at the points one half and three fourths the length of the string will remain; the



others will be thrown off. The string vibrates between these *nodes*, or points of no vibration.

(28) The same result may be observed by sounding, near a violin or guitar, a tuning fork, giving the same sound as one of the strings of the instrument, which also will vibrate. If the tone be changed to that of another string, the latter likewise will vibrate.

Take a glass jar of small diameter and about twenty inches deep. Set a tuning fork to vibrating and place it over the mouth of the jar. A very faint sound is heard. Pour water into the jar slowly, and note the increase of intensity of the sound.

If more water be poured into the jar, the intensity of the sound will be again diminished. The effect of the water is to shorten the column of air in the jar, until it will vibrate in unison with the fork, producing the maximum intensity of the sound.

(29) Fill the same jar with water until a full sound is produced. Now turn the vibrating fork slowly in the hand, so that at one position the arms of the fork are in line, one above the other. In four positions of the fork there are loud, clear tones; in four other positions the sound is very faint or entirely inaudible. These results are due to the reinforcement or interference of the sound waves.

(30) Fasten to an ordinary gas jet a tube four or five inches long, having the top smaller than the bottom. When the gas is lighted there should be a small, round flame. Now lower a glass tube over the gas jet. Soon a point is reached where a faint sound is heard. This gradually increases as the tube is lowered, and becomes very loud and shrill. The flame is thrown into vibration by the current of air coming in at the bottom of the tube. The vibration of the flame is transmitted to the column of air in the tube, producing the sound.

(31) Press down the keys C, G, and C in the octave above middle C on the piano. Without releasing these

keys, strike a quick hard blow upon C below middle C. The damper falling, the sound will cease almost immediately, but a soft chord will be heard, caused by the vibration of the other three strings whose dampers are raised. A vibrating string separates into segments, producing different tones. The full vibration of the string produces the full, or fundamental, note. The vibrating segments produce overtones, or harmonics. In this experiment the C, G, C strings vibrate sympathetically with the overtones of the string that was struck.

(32) Take a metal plate about six inches square, mounted on a small stand or support. Strew fine sand on the surface of the plate, and draw a violin bow across one edge. The sand will collect in irregular lines along the diagonals of the square. Many very beautiful patterns may be obtained.

**Light.** — The more simple laws of light may be explained and illustrated by a number of pleasing experiments, among which the following are suggested:

(33) Place a coin in a saucer, and stand back far enough so that the coin cannot be seen. Now pour water into the saucer, and the coin may be seen. The ray of light, passing from the water to the air, changes its direction downward. Hence we say that light, in passing from one medium to the other, is refracted, or changed in direction. This may be shown also by filling a glass dish with water, and allowing a sunbeam to fall on the surface. The ray of light will bend as it enters.

In passing from the air into the water, a ray of light passes from a rarer medium to a denser. The following law of refraction may be deduced from these experiments:

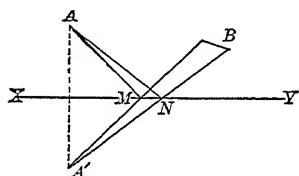
*In passing from a denser to a rarer medium, the ray is bent away from a line perpendicular to the refracted surface. In passing from a rarer to a denser medium, the ray of light is refracted toward a line perpendicular to the refracted surface.*

(34) Darken the room (where this can be done), leaving a small opening in the curtain to admit a single ray of light.

Allow the ray of light to pass through a prism, and it will be broken up into the seven primary colors. The drops of water upon which the sunlight falls during a shower act as prisms, separating the beams of light, and produce the rainbow.

(35) Allow a ray of light to enter the room and fall upon a mirror. The ray will be reflected, and at the same angle at which it strikes the mirror. By this law we may explain why the image of an object in a mirror always appears as far behind the mirror as the object is in front of it.

Let  $A$  be any object, and  $XY$  the surface of a mirror;  $AM$  and  $AN$ , rays of light from the object to the mirror.



The rays  $AM$  and  $AN$  are reflected to the eye at  $B$ ; but if the lines  $BM$  and  $BN$  are produced, they will meet at a point  $A'$ , back of the mirror. Now,  $AN$  is equal to  $A'N$ ; therefore, the image of  $A$  will appear as

far behind  $XY$  as  $A$  itself is in front of it.

Color is due to the quality of the light waves which illuminate an object, and not to any quality of the object itself; and for any object to have a certain color, it must be capable of receiving light waves of that color, and also of absorbing or transmitting waves of other colors.

(36) Procure two small tin boxes of equal capacity, one being bright, the other being covered with lampblack. Make an opening in the top of each, to admit a thermometer. Fill both with boiling water, and allow them to cool. The black one will be found to cool more rapidly. Then place the boxes in the sun or in front of the fire. The temperature in the blackened box will rise more rapidly. We assume from this that a good radiator is also a good absorber. Dew is formed on certain objects that lose their heat by radiation, causing condensation of the watery vapor in contact with them.

**Electricity and Magnetism.** — Electrical energy may be generated by friction, by chemical action, or by induction. Frictional electricity may be developed very easily, and often unconsciously. By simply scuffing the feet upon the carpet or rug, a person may sometimes generate sufficient electricity to light a gas jet. One's hair often crackles and is attracted or repelled when combed rapidly with a gutta-percha comb. A cat's back, rubbed in the dark, will emit sparks.

(37) Take a thin sheet of gutta-percha about a foot square; lay it upon a table, and rub it briskly with a cat's skin or other piece of fur. The table will become powerfully electrified.

Hold the gutta-percha over the head of a person whose hair is dry; the hair will be attracted by it.

(38) On a tea tray put a sheet of gutta-percha and rub briskly with a piece of fur; place the tray, the gutta-percha remaining on it, on a dry tumbler. Remove the gutta-percha; bring the knuckle near the tray, and a spark will be received. Put the gutta-percha back on the tray, and touch again with the knuckle. Another spark will be received.

(39) Take a glass tube (a straight lamp chimney will do) and rub it briskly with a piece of silk. Bend a glass tube, and from the bent arm suspend by silk threads a couple of balls of elder pith. Present the glass tube to the balls. They will be attracted, and then repelled.

(40) Electrify a stick of sealing wax, and present it to the balls. The same action will be noticed. Touch one ball with the glass, and the other with the wax. The balls, instead of repelling each other, are attracted.

(41) Make an insulated stool by placing a dry board upon four dry glass tumblers. Let one boy stand upon this stool, and another upon the floor. Strike the latter several times with a piece of fur. If the two boys bring their knuckles together, a spark will pass from one to the other.

(42) To generate electricity by chemical action, take a tumbler two thirds full of water, and add to it two or three tablespoonfuls of strong sulphuric acid. Place a strip of sheet copper and a piece of zinc (each about five inches long and one and one half inches wide) in the solution, having previously soldered a piece of No. 16 copper wire (about twelve inches long) to each piece of metal. If the ends of the wire are rubbed together in a darkened room, a small spark may be observed.

(43) Place a magnetic needle near the tumbler. Hold the wires so that the current will pass in the same direction as the needle; vary the position of the current, the wire, and the needle, and note the results. A magnetic needle may be made by magnetizing a steel needle and suspending it from a silk thread fastened in the middle of it.

(44) Place a large iron nail in a vessel of iron filings. None of the particles of iron will adhere to it. Wrap a paper around the nail, leaving the ends exposed, and wind around it twenty or more turns of copper wire, being careful that the coils do not touch each other. Connect this wire with the zinc and copper, so that there will be a continuous connection. Put one end of the nail into the filings; when the nail is taken out, the filings will adhere to it.

The best batteries for school use are the Daniells and Grenet cells. The former consist of zinc and copper elements. The zinc is suspended in a porous cup, partly filled with water, to which a little zinc sulphate is added, to hasten the action of the battery. Outside the porous cup is a thin cylinder of copper, immersed in a saturated solution of copper sulphate. In a pocket near the top of the cylinder, a few lumps of copper sulphate are placed. These are gradually dissolved, to take the place of that consumed by the action of the battery. The battery requires very little attention, and gives a comparatively constant current.

The Grenet battery consists of two pieces of carbon and one of zinc. The zinc should be fastened to a sliding rod,

so that it may be drawn up out of the liquid when the battery is not in use. The liquid for the battery may be made by mixing one gallon of water, one pound of bichromate of potash, and from half a pint to a pint of sulphuric acid. The zincs should be well amalgamated, and *always* should be taken out of the liquid when the battery is not in use. The battery is very energetic, and well adapted for school use. A battery of six of these cells will be sufficient to perform many of the ordinary experiments in electricity.

(45) For a simple experiment in magnetism, take two stout darning needles that have been magnetized by drawing them several times, in the same direction, over the pole of a powerful electro-magnet. Suspend these needles a few feet from each other by fine silk threads. They will take the same position, a north and south one, the poles lying in the same direction. Bring the points of the needles near to each other; bring the eyes near to each other; bring a point and an eye together, and note the results.

(46) Place a horseshoe magnet under a pane of glass and close to it. Sprinkle fine iron filings over the plate, tapping it gently to assist the arrangement of the filings. Perform the same experiment using a bar magnet. Note the results. The lines about which the filings arrange themselves are called lines of magnetic force. Lay a bar magnet in a vessel of iron filings. Remove the magnet, and the filings will cling to the end, while the center of the magnet will be free from them.

(47) Magnetize a steel knitting needle, and the same action will be observed. Break the needle in two; each part will be found to be a magnet.

(48) Take a coil of wire and fasten one end, allowing the other to touch the surface of a cup of mercury. Pass a current through the coil. The current is nearly parallel to itself, and causes a contraction of the coil. As soon as the end is removed from the mercury, the current is broken and the coil drops down again.

Small electric lights, telegraph keys and sounders, small motors, electric bells, and insulated wire will furnish an almost endless field for the illustration of the principles of electricity as applied to modern conveniences. With a small class of boys interested in the subject, and willing (as most of them are) to contribute of their pocket money for these things, a partial working laboratory is within the grasp of every teacher.

**Miscellaneous Experiments and Suggestions.** — (49) Fill three jars, one with water, one with a strong solution of salt, the third with a solution of salt of an intermediate density (to be determined by experiment). An egg placed in the first solution will sink; placed in the second, it will float. The third solution may be made of such density that the egg will remain poised in any position in which it may be placed.

(50) Float two sewing needles on water, placing them parallel and quite close together. Let fall a drop of alcohol between them, and they will fly apart.

(51) Wet a piece of parchment paper, and tie it over the end of a glass tube. Fill the tube partly with a solution of copper sulphate, and immerse in a tumbler of water so that the water is at the same line in both tube and tumbler. In a short time the water in the tube will have risen and the water in the tumbler will be colored blue, showing that the liquids have changed places.

(52) The porosity of a brick may be shown by placing two funnels with their large openings on opposite sides of the brick. Place a lighted candle at the smaller opening of one funnel. Hold both funnels tightly against the brick, and blow in the small end of the one opposite the candle. The candle will be extinguished.

Explain the theory of the transmission of light and sound by waves, the common medium of the transmission of sound being *air*, the medium of the transmission of light being *ether*. Sound and light travel in waves; that is, they pro-

duce a vibratory motion of the medium through which they pass. The intensity of sound waves depends upon the density of the medium, and upon the distance from the source of the sound. Sound waves travel in the air at the rate of about 1140 feet per second; in water four times, and in iron fifteen times as fast. Sound may be refracted or reflected. Echoes are produced by the reflection of sound. The sounds of musical instruments are produced by vibration.

In wind instruments the vibrating body is a column of air; in the reed and stringed instruments, the sound is produced by the vibration of the reeds and strings. Good examples of these are the pipe organ, the clarinet, and the guitar or piano.

Luminous bodies give off light in every direction. In a medium of the same density, light travels in straight lines. The intensity of light decreases as the square of the distance from its source.

Light travels at the rate of about 186,000 miles per second. The difference between the velocities of light and sound are well exemplified in the shooting of a gun or the blowing of a whistle. A person at a distance will see the smoke from the gun before he hears the report, and the steam from the whistle before he hears the sound.

To enter into a detailed description of apparatus would be beyond the limits of this chapter. A skillful carpenter or blacksmith can make many of the instruments required, at a very moderate cost. The best way, if possible, is for the pupils to make their own apparatus for simple experiments. The value of experimentation lies rather in the habits of observation and discovery to which it leads, and the acquirement of a method of logical and scientific investigation, than in the difficulty or brilliancy of the experiments themselves.



## CHAPTER XIII

### EASY EXPERIMENTS IN CHEMISTRY

**Origin of the Science.**—Chemistry is one of the newer sciences, but has been brought to a marvelous degree of advancement within the past half century, and especially within recent years. Its history is possessed of peculiar and romantic interest, and for this reason a brief account of its origin is given here.

The word "Chemistry" is derived from the Greek, and the earliest meaning seems to have referred to the production of gold and silver from the baser metals, which was long supposed to be possible. This idea is a very old one, for Zosimus, the Panopolite, writing in the fifth century, implies that this art had been known long before his time, and probably had been brought from Egypt. From the Greeks, at Constantinople, the idea came into the possession of the Arabs. Under the general name of *alchemy* they seem to have grouped something of the sciences of chemistry, physics, and medicine. It was known as "the black art," and its practice presupposed a contract with the powers of the lower world.

The idea of the philosopher's stone, which by contact would change the baser metals into gold, passed into Europe early in the middle ages; and, from the number of books upon the subject, it must have been popular, at least with those who had a taste for dangerous speculation. Some of the strange stories that have come down to us were formerly received with implicit confidence.

Manget, a famous Swiss scientist of the last century, quotes, on the authority of Mr. Gros (a clergyman of Geneva), the following:

About 1650 an unknown Italian came to Geneva and took lodgings at the Green Cross. After remaining a day or two, he requested his landlord to furnish him a guide acquainted with Italian, who could show him the objects of interest in the town. He was referred to Mr. Gros, then a student, about twenty years of age. After a fortnight, the Italian began to complain of lack of money, and finally asked Mr. Gros if he knew any goldsmith whose bellows and other utensils they could borrow. Mr. Gros named one, and the Italian procured from him crucibles, pure tin, quicksilver, and other necessary articles. The goldsmith left the shop, in order that the Italian might work under less restraint, one workman and Mr. Gros remaining as attendants. The Italian put a quantity of tin in one crucible, and a quantity of quicksilver in another. The tin was melted, and the quicksilver heated. The latter was then poured into the melted tin, and a quantity of red powder, inclosed in wax, was projected into the amalgam. An agitation took place, and a great deal of smoke rose from the crucible. This subsiding, the contents were poured out, forming six heavy ingots having the appearance of gold. The goldsmith, being called in, subjected the metal to the most complete tests. It possessed all of the properties of pure gold. From the master of the mint, the Italian received Spanish coins equal in weight to the ingots. To Mr. Gros he gave twenty pieces, and to the landlord fifteen more, to pay for a supper he was to eat with them. He then left the house, promising to return, but was never seen again.

Louis XI of France took potable, or liquid, gold as a remedy for his many ills. Friar Bacon was supposed also to have discovered the philosopher's stone, in which, as well as in astrology, he was a firm believer. The great secret the alchemists sought was the ability to prolong human life indefinitely, to the theory of which project Bacon was much attached. On one occasion he informed Pope Nicholas of an old man who found a golden phial containing a yellow liquid, while plowing on his farm in Sicily. The farmer drank the liquid and was, it is said, at once changed into a healthy, handsome, and accomplished youth.

Gebir, an Arabian alchemist, held that the original elements were mercury, sulphur, and arsenic. Of these, mercury and sulphur seem to have been the most interesting to the philosophers.

One of the most famous alchemists was Paracelsus, who was born near Zurich, about the end of the fifteenth century. He made many interesting researches, and discovered the properties and methods of preparation of many of the metals. During the eighteenth century the science of chemistry made a decided step forward, owing to the discoveries of Geoffroy, Boerhaave, Scheele, and Lavoisier; but until the publication of Dalton's new system of chemical philosophy, in 1810, the science of chemistry consisted principally of the discoveries of separate investigators. Dalton's atomic theory elevated chemistry to a science, but its progress has been so rapid that the theory of Dalton is no longer tenable in its entirety. New discoveries and new relations have given rise to modified theories, but the science of chemistry is as yet in a stage of transition. With these theories, however, the explanation of the simpler phenomena of chemistry has little to do, there being many interesting experiments that are capable of explanation and that will serve to give the pupil an interest in this fascinating subject.

**Experimental Lessons in Chemistry.**—Presuming that chemistry, like physics, is to be taught in some form more generally than heretofore in the schools of the various grades, it is of course highly important that the teacher have the tact as well as the knowledge to adapt the instruction to the age and advancement of the pupils under his supervision. Following herewith are a few suggestive lessons of a general character, which may be variously adapted, according to the grade and the circumstances of the school.

**Requisite Materials.**—Laboratories and appliances for work in chemistry may be obtained at much less trouble and expense than similar equipments in physics. An alcohol lamp (where gas cannot be had), a ring stand, half a

dozen test tubes, of assorted sizes, the same number of flasks and of rubber stoppers or common corks, a few feet each of rubber tubing and of glass tubing, four or five wide-mouthed jars, a porcelain evaporating dish, a piece of wire gauze, and half a dozen glass-stoppered bottles are about all that is necessary in the way of individual apparatus. For general class use, metric rules, graduates and scales, filter papers, blow pipes, platinum wire, crucibles, and thistle or funnel tubes should be added. The chemicals may be purchased at a small cost from any large supply house.

**Scientific Terms.** — Where scientific terms are used, care should be taken that they convey a precise and correct meaning. A few examples will illustrate this.

Matter is composed of molecules, and molecules are made up of atoms.

An *atom* is the smallest particle of matter that can enter into combination to form a compound. A *molecule* is the smallest portion of the compound thus formed.

An elementary substance, or *element*, is a substance which cannot be separated into two or more essentially different kinds of matter; as, for instance, iron, gold, silver, oxygen, hydrogen, etc.

A chemical *compound* is a union of two or more elements to form a substance distinct from either. Thus water is a compound of hydrogen and oxygen, a molecule of water containing two atoms of the former and one of the latter.

A *mixture* is a mass of two or more ingredients, the particles of which are not chemically compounded with each other, however thoroughly and finely they may be commingled. Thus the air is a mixture of oxygen, nitrogen, and argon, with a small amount of carbon dioxide.

*Organic* substances are those which have been formed of animal or vegetable life. Bone and cotton are organic.

*Chemical affinity* is the attraction between atoms of different kinds by which they form compounds. The compound

is the normal state of matter, the uncompound forms being rarely found. Chemical combination may be illustrated by a simple experiment, as follows:

Pulverize separately a teaspoonful of loaf sugar and chlorate of potash, mix them on a porcelain plate, and let fall a drop of sulphuric acid from the end of a glass rod, upon the mixture. It will ignite immediately, and the substance that remains will be neither sugar nor potash, but a compound.

Chemical attraction is effected only at insensible distances, and is most energetic between dissimilar substances.

**Physical and Chemical Changes.** — A physical change is one that does not alter the composition of the molecule; a chemical change is one that changes the composition of the molecule, and therefore changes the nature of the substance. Water may be frozen into solid blocks of ice or dissipated into a gas in the form of steam. These changes are physical and not chemical, since the composition of the molecules is not altered by them. A piece of iron may be raised to a white heat or cooled to a very low temperature, may be melted, welded, magnetized, and subjected to various other processes, without losing its identity as an elementary substance. When any part of it is converted into rust, by uniting chemically with the oxygen of the air, there is a chemical change, for the molecules of the new substance thus formed combine atoms of different nature.

**Examples of Chemical Changes.** — Chemical changes are often startling in their phenomena. Solids sometimes combine to form liquids, and liquids to form solids. Colorless liquids are combined to form other liquids of deep or brilliant colors. A few illustrations of the radical changes caused by chemical reactions will be of interest even to pupils who are not sufficiently advanced to understand fully the nature of the reactions. The following are a few such examples, which will serve in a general way to illustrate chemical changes.

Place in a mortar two parts, by weight, of sodium sulphate and one part, by weight, of potassium carbonate. Rub them together, and the two solids will form a liquid.

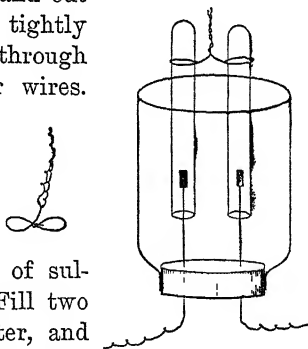
Dissolve five or six lumps of sugar in a glass, with as little warm water as possible. Place the glass upon a large plate and pour into it, slowly, strong sulphuric acid, stirring the mixture with a glass rod at the same time. The result is a black, porous solid.

Take four small glasses, and into one put a solution of silver nitrate; into the second, a solution of lead nitrate; into the third, chlorine water to which a dilute solution of freshly prepared starch has been added; into the fourth, a solution of corrosive sublimate.

Each solution will be as clear as water. Make a solution of iodide of potassium, and put a few drops into each glass. Yellow, orange, blue, and scarlet solutions will be formed.

**The Separation of Water into its Elements.**—The composition of water may be shown by the following experiment:

Take a wide-mouthed bottle and cut it in two, put a paraffined cork tightly in the mouth of the bottle, and through the cork run the two copper wires. Fasten a small plate of platinum, about one inch long and one half inch wide, on the end of each wire. Fill the vessel nearly full of water, to which about one tenth of its volume of sulphuric acid has been added. Fill two test tubes with acidulated water, and invert them in the vessel. They may



be separated by bending a piece of copper wire so that the openings will as nearly fit the tubes as possible (see Figure). The tubes may then be supported in the wires by fastening rubber bands about them. Attach the wires

to a couple of cells of a battery in series, and bring the platinum plates into the mouths of the tubes. Bubbles will be given off the plates, and the water will be pressed down.

Remove the first tube by placing the thumb over the mouth of it, to prevent the escape of the gas. Invert the tube, and apply a lighted match to it; a slight explosion will follow. Remove the other tube in the same way, and insert in the mouth of it a thin splinter with a spark on the end; the splinter will take fire and burn brilliantly. The water in the vessel has been separated into two gases, oxygen and hydrogen.

**Experiments with Oxygen.** — Experiments with oxygen are nearly all interesting and valuable.

To make oxygen, take some crystals of potassium chlorate and, without pulverizing, mix with the same weight of black oxide of manganese. Put the mixture into a test tube, having the cork fit tightly, and into the cork insert a delivery tube. Fill several wide-mouthed bottles with water and put them, mouth downward, into a receiver partly filled with water, so that the mouths of the bottles will be below the surface of the liquid. A convenient receiver may be made from a square tin pan, four or five inches deep. Make a shelf of tin, four inches wide, bending it so that the shelf will be about three inches under water. Cut holes into the tin shelf, so that the mouths of the delivery tubes may be inserted through it into the mouths of the bottles. Now slowly heat the mixture in the test tube, and a gas will be given off and collected in the bottles. Remove the delivery tubes from the water as soon as the heat is taken away. Remove the bottles from the receiver, covering the mouths, while still under water, with plates of glass.

Take a short piece of crayon, hollow out the end, and wrap a wire tightly around it, to serve as a handle. In the hollow, place a small piece of sulphur. Ignite it by holding it in a flame. Then put the burning sulphur into one

of the bottles of oxygen. Compare the flame of sulphur in oxygen with the flame in air.

Take a piece of iron picture cord wire, and hold one end in the flame for a moment, then dip it into some sulphur. Enough sulphur will adhere to the wire to burn when the wire is again held in the flame. Place the wire in oxygen; it will burn, giving off bright sparks.

The compounds of oxygen with other elements are called oxides. Oxygen is very widely distributed, and is very active in combination. It is a transparent, odorless, tasteless, colorless gas. It has been liquefied by subjecting it to high pressure and low temperature. It is the supporter of animal life and of combustion.

**Experiments with Hydrogen.** — Experiments with hydrogen require some care, in view of the liability of the gas to explode in air. The following familiar experiments are of great interest to pupils. Take a bottle of thick glass, eight or ten inches high, and fit into it tightly a rubber cork (or an ordinary cork of fine grain will answer). Arrange a delivery tube and bottles, as in previous experiments; put some pieces of sheet zinc (or, better, granulated zinc) into the bottle, and pour in water until it is about a quarter full. Put a funnel tube, or glass tube in which a funnel may be placed, through the cork, and let the bottom of it extend a little way into the water. Pour hydrochloric acid slowly through this tube, and the gas will be generated rapidly. In using the receivers filled with hydrogen, be careful to hold them bottom upward, and do not have the receivers too large, as hydrogen mixed with air is violently explosive.

If a lighted match is placed at the mouth of the receiver and an explosion occurs, the gas is mixed with the air; but if the gas burns quietly, it is pure.

Take two large test tubes of the same size, and fill one of them with hydrogen. Hold both of them inverted, and bring the mouth of the one containing hydrogen close to the mouth of the other, inclining it gradually until it is



upright. A test will show that the tube which contained hydrogen now contains air, and that the hydrogen has displaced the air in the other vessel. The hydrogen has been poured upward.

Fill a rubber gas bag with hydrogen, then attach one end of a rubber delivery tube to the bag, and the other end to a common clay pipe. Regulate the flow of gas by a stopcock. Make a solution of white castile soap in warm water, and add half its volume of glycerine. Place the pipe, mouth downward, in this solution, and, as soon as the film has formed over the mouth, raise the pipe. The bubble will expand, break away, and rise like a balloon. Have some one touch the bubbles with a lighted candle, and notice the explosion. Do not bring the candle near to the mouth of the pipe.

Hydrogen is transparent, colorless, odorless, and tasteless; it is fourteen and one half times lighter than air, and eleven thousand times lighter than water.

Take the delivery tube from the generator, and replace it by a straight tube drawn out at the end to form a jet. Test the gas until sure that it is not mixed with air, then light it as it escapes from the jet. Hold over the flame a clear, dry, cold tumbler. In a few moments the glass will be dimmed with a sort of vapor. By condensation this will be found to be water. Hold a glass tube over the flame; move it up or down, and a position will be found where the flame gives out a musical note. If the experiment does not succeed at first, vary the size and length of the tube.

**Experiments with Nitrogen.** — The peculiarly negative character of nitrogen may be illustrated as follows:

Place a piece of phosphorus upon a porcelain dish. Ignite the phosphorus, and place over it an inverted glass bottle. As the phosphorus burns, it will take up the oxygen from the air contained in the bottle, leaving nitrogen behind. By applying a lighted match or dipping a burning splinter in the gas, it will be found neither to burn nor to support com-

bustion. It is colorless, odorless, and tasteless. It combines directly with very few elements. It is not poisonous, but does not support life. It is found indirectly combined in very many forms.

**Carbon Dioxide.** — Carbonic acid gas, more correctly called carbon dioxide, is of special interest in view of its relation to hygiene. Following are a few experiments with this gas.

Take a glass bottle in which a few small pieces of marble are placed; cork the bottle tightly, and put a tight-fitting glass tube through the cork, the other end of the tube resting in a tumbler or any convenient jar. Remove the cork of the first bottle, and pour in some hydrochloric acid. A gas will be evolved immediately. The gas is one and one half times heavier than air, and hence will remain at the bottom of the receiver. It may be poured out and down, as water is poured. Thrust a burning match into the receiver, and it will be extinguished. Pour the gas from one tumbler into another, using the same test to determine that the second tumbler contains the gas. A lighted candle may be extinguished by pouring the gas upon it.

Put a few pieces of slacked lime into a bottle, and pour water on them; shake the bottle well and let the liquid settle; pour off the pure liquid (lime water), and keep in a tightly corked bottle.

Take a little lime water, and pass carbonic acid gas through it; a white precipitate will be formed, and, if allowed, will settle to the bottom. This is calcium carbonate, a substance of the same kind as that from which the gas was made.

Take another tumbler of lime water, and with a tube blow the breath into it for some time; a white precipitate will be formed, showing that the carbonic acid gas is present in the air coming from the lungs.

Expose some lime water to the air for a day or longer; a white scum on the surface shows that carbonic acid gas is present in the air.

Make a small loop in the end of a piece of wire; dip the wire into the lime water, and, on withdrawing it, a drop will cling to the loop. Hold this above the flame of a candle; in a few moments it will have a milky appearance, showing that carbonic acid gas is a product of combustion.

**Absorption of Gases.**—The absorption of gases may be illustrated by a simple experiment. Take a glass tube, about one half inch in diameter, cork one end tightly, and through the cork run another small tube, to which a piece of rubber tubing may be attached. Arrange a flask in the same manner, and to the small tube in the cork of the flask attach the other end of the rubber tube. Fill the flask with carbonic acid gas, and put the unattached end of the tube in a tumbler of water; heat strongly one or two pieces of charcoal, drop them in the flask, and cork it quickly. If the connections are tight, the water will rise in the tube. This is caused by the partial vacuum made by the charcoal absorbing the carbonic acid gas.

**Weighing Gases.**—The comparative gravities of gases may be indicated with very simple apparatus. Arrange a balance of wire, if no other can be had, making a scale of cardboard or paper, cutting it into a conical disk. Upon the other end of the balance place a paper box about five inches square; add weights until the sides balance. Pour carbonic acid gas into the box, and it will descend immediately. Now invert the box, and pour into it, upward, some hydrogen gas; the box will rise.

**Chlorine.**—Chlorine is especially interesting as an element of common salt (sodium chloride). Chlorine can be made by taking equal parts, by weight, of black oxide of manganese and common salt. Make a mixture of sulphuric acid and water, twelve parts of acid and six parts of water. When this mixture has become cool, pour it over the salt and oxide of manganese; arrange delivery tubes as in the previous experiment, and collect a number of bottles of gas and cover them with greasy glass plates.

Into one of the bottles of chlorine put a moistened piece of colored calico, and notice the change of colors.

In a darkened room prepare a solution of hydrogen and chlorine, in two bottles. Wrap towels around the bottles, to guard against accidents; then bring one of the bottles into the bright sunlight. Take away the towel, and the sunlight will cause an explosion of the mixed gases. Apply a flame to the mouth of the other bottle, and the mixed gases will combine with an explosion.

Chlorine water may be prepared by passing the gas directly into the water.

Fill four or five bottles with chlorine water, and pour into the different bottles different colored solutions—as indigo, litmus, cochineal, and aniline dyes of different colors—and note the results.

Chlorine in the form of chloride of lime is used largely as a disinfectant, and in manufacturing.

Chlorine is a greenish yellow gas, with a suffocating odor; and all experiments with it should be performed in a draft, the teacher being particularly careful not to breathe the gas. As the gas is two and one half times heavier than air, it may be collected by downward displacement.

**Acids, Bases, and Salts.**—An *acid* is a compound containing hydrogen, which is easily replaced by metal or a compound of a metal called the base. A *base* is a substance containing a metal combined with oxygen and hydrogen. The products of the action of acids on bases are called salts. The more common acids are nitric, sulphuric, and hydrochloric; the more common bases are sodium, potassium, and calcium hydroxides.

**Carbon.**—Every living thing contains carbon as an essential element. The number of its compounds is almost infinite. Uncombined, it occurs pure in two widely different substances, the diamond and graphite. Almost nothing is known of the conditions that give rise to their formation. When heated to a high temperature without access to air,

the diamond swells and is converted into a black mass without loss of weight; heated in oxygen, it burns up, forming carbon dioxide. Graphite is found in nature in large quantities. It is used in making lead pencils and as a lubricant. Charcoal is made by heating wood without access to air. Lampblack is a form of carbon collected on a surface from the flame of burning oils. Coal has been formed by the decomposition of vegetable matter without much access to air. Under ordinary temperatures carbon does not form combinations, but at high temperatures it combines readily with oxygen. It is found in combination with several elements. Carbon in the form of carbon dioxide forms a large part of the food of plants. Carbon dioxide is given off in the exhaled breath of animals, and is one of the products of combustion. The foliage of plants takes up the carbon dioxide of the air, and incorporates it in the body of the plant. When life ceases in animals or plants, a product of decomposition is carbon dioxide.

**Iodine.**—Iodine is a blue-black crystalline solid. Its vapor is the heaviest known, and is of a beautiful violet color. It may be seen by placing some crystals of iodine on a heated brick, and covering them with an inverted glass jar. Iodine is found in sea water, and is made from the ashes of seaweed. It may be used as a test for starch in the following experiments:

Take a tumbler half filled with water, to which a few drops of tincture of iodine or a small crystal of iodine has been added. There is no marked change in the color; now add a teaspoonful of thin starch paste, and the whole solution will take a deep blue color. This is a characteristic test for starch. Scrape a potato and pour boiling water upon it; then pour a little of this water into a solution of iodine. The blue color will indicate the presence of starch. Other foods may be tested for starch in the same way.

The colors of the various iodine compounds are thus shown: Dissolve a crystal of iodine in some alcohol, and pour a

few drops of this solution into a tumbler of water. Add to this a little carbon disulphide; it will be colored a purple red. Take three tall glass jars, and nearly fill each with water. Put a few drops of solution of potassium iodine into each jar; to the first add a few drops of solution of corrosive sublimate, to the second a solution of mercurous nitrate, to the third a solution of sugar of lead. Scarlet, yellowish green, and brilliant yellow solutions will be formed.

Detonating powder may be formed as follows:

Take a little pulverized iodine; put it into a small dish, and pour strong ammonia over it; cover, and allow it to stand twenty minutes. Stir up the powder in the bottom of the dish, and filter through five or six filter papers. Wash the powder well with water, and, when the liquid has been filtered away, remove the papers and pin them to a piece of board, allowing them to dry without heating. When the powder is dry it may be exploded by brushing it with a feather or simply by jarring it. Only a very small amount of this powder should be made at one time, and great care should be taken in reference to it.

**An Experiment in Combustion.**—To the familiar phenomena of combustion may be added some especially interesting examples, as in the following experiment:

Obtain some powdered potassium chloride, and with the fingers and a piece of paper mix it thoroughly with an equal bulk of powdered sugar. With this mixture form on a platter a connected design, as a star, a heart, or a word. From the end of a glass rod let fall a drop of sulphuric acid on the mixture; a vivid combustion will follow, and, after the combustion, the design will be found as a black incrustation. This experiment should be performed with great care.

**Absorption and Loss of Moisture.**—The properties of liquefaction (turning to liquid through the absorption of moisture), and of giving out moisture (the result being a crumbling to powder) may be illustrated as follows:

Expose a few pieces of calcium chloride to the air; in a short time they will have absorbed sufficient moisture to dissolve them completely.

In the same way expose a crystal of washing soda to the air, and it will lose moisture and crumble to fine powder.

The experiment may be made more interesting if both the calcium chloride and the washing soda are exposed to the air at the same time or while in the same vessel. The one will dissolve, and the other will change to powder. The natural supposition is that the moisture to dissolve the calcium chloride came from the soda.

**Filtration.** — The process and results of filtration may be thus illustrated:

Take a funnel, fit into it a folded filter paper, and half fill with powdered charcoal; make a solution of indigo and filter this through the charcoal. If this be carefully done, the filtered water will be colorless.

Next filter a solution of quinine or an extract of hops through charcoal; the bitter taste will be partly, if not entirely, removed.

**Etching on Glass.** — Names and other devices may be etched on glass by covering the glass with a thin layer of wax, and scratching, with a sharp point on the surface of the wax, the design to be etched, being careful that the point penetrates to the surface of the glass. Make a small tray of sheet lead, or take an old dish, and place in it some powdered fluor spar. Pour enough sulphuric acid over it to make fine paste, and put the glass plate, wax down, over the dish and warm gently; then set it away in a warm place for two or three hours. Scrape the wax off the glass, and clean it by rubbing with turpentine or alcohol, and the design will be found upon it.

**How Crystals are deposited.** — Dissolve five to eight grains of lead acetate in a glass of water, and suspend in it an irregular piece of sheet zinc; the sheet will soon be covered with crystalline spangles of metallic lead. On account of

the shape of the deposited lead, it is known as "the lead tree." Similarly, a piece of steel, if immersed for a few moments in a solution of copper sulphate, will be covered with a deposit of copper.

**Torpedoes.** — Take a very small crystal of potassium chloride and a piece of sulphur the same size, and grind them together in a mortar with a porcelain pestle. A series of sharp explosions will follow. These chemicals mixed with gravel and wrapped in tissue paper make the torpedo.

**To make and destroy Colors.** — Add enough potassium permanganate to a pitcher of water to give it a decided red color. Make a strong solution of ferrous sulphate, and put a small amount in a glass containing a little sulphuric acid. Pour the pitcher solution in the glass, and the color will be destroyed. By experiment the colors may be changed or destroyed at will.

**Acid Tests.** — Take a few pieces of litmus, and dissolve in hot water. Color the water in a glass pitcher with this blue solution, and add a few drops of hydrochloric acid, and the solution will turn red; if a little ammonia be added, it will turn blue. The red color indicates the presence of an acid; the blue, the presence of an alkali.

**Plating.** — Suspend a copper plate in a bath made by dissolving copper sulphate in dilute sulphuric acid. Attach to the plate the positive pole of a battery of two or three cells. Suspend the object to be plated from the negative pole, first thoroughly cleaning it by washing it in dilute acid. The action in plating is both chemical and physical. The current dissolves the copper on the positive pole, and copper from the solution is deposited on the object to be plated. To plate with silver or gold, use a silver or gold plate instead of the copper plate, and a solution of cyanide of silver or gold.

Many other experiments will suggest themselves to the teacher, or will be furnished by the modern text-book or laboratory manual. In the selection of experiments that



are to be performed by children, safety should be the first consideration.

Hydrochloric acid is better adapted for general use than other common acids are. If spilled upon the clothing, a little ammonia will destroy it and restore the color of the clothing. If experiments are performed by the teacher with or without the aid of the class, they may be made somewhat more complex in their character, and they should be so striking as to impress all who see them. For individual work in science classes, the experiments may be made more simple; but simplicity should not run to childish play—a fault common to many books on laboratory practice.

**Some Historical Notes on Various Elements.**—Hydrogen gas, under the name of combustile air, was obtained by Paracelsus in the sixteenth century. Cavendish, in 1756, described accurately the process of its manufacture and its various properties.

Nitrogen was discovered by Rutherford in 1772. Scheele discovered chlorine in 1774; in 1810 Davy proved it to be an element, and gave it the name it now bears.

Carbonic acid gas is the well-known “choke damp” that follows the explosion of “fire damp” in mines. It has been used to put out fires in burning mines, and has succeeded when all other means have failed. In the Upas Valley, in Java, the gas rises to about eighteen feet above the surface; the ground is covered with the bones of men and animals who have unknowingly entered the valley. Carbonic acid gas is also given off from burning charcoal, and frequently causes death by escape from stoves where drafts are partially closed.

Oxygen was discovered in 1774 by Priestley, but was given its present name by Lavoisier in 1789. From its activity in combination, it was supposed to be an acid-forming element. Oxygen occurs in a modified form, ozone, to which it may be changed by passing a current of electricity through it. The relations between oxygen and ozone are not fully

understood, but have been made the subject of many interesting and delicate experiments.

**Some Theories of Chemistry.**—Tyndall, in a chapter on crystals and molecular forces, in essays entitled *Fragments of Science*, says: "According to Newton, not only does the sun attract the earth, and the earth attract the sun *as wholes*, but every particle of the sun attracts every particle of the earth, and the converse. His conclusion was that the attraction of the masses was simply the sum of the attractions of their constituent particles.

"This result seems so obvious that you will perhaps wonder at my dwelling upon it, but it really marks a turning point in our notions of force. You have probably heard of late of certain disturbers of the public peace named Democritus, Epicurus, and Lucretius. These men adopted, developed, and diffused the dangerous doctrine of atoms and molecules, which found its consummation in the city of Manchester at the hands of the immortal John Dalton. Now the grand old pagans whom I have named, and their followers up to the time of Newton, had pictured these atoms as falling and flying through space, hitting each other and clinging together by imaginary hooks and claws. They entirely missed the central idea that the molecules could come together, not by being fortuitously knocked together, but by their own mutual attractions. This is one of the great steps taken by Newton. He familiarized the world with the conception of molecular force."

**Size of Molecules and Atoms.**—By many experiments, investigators have succeeded in determining approximately the size of molecules. These are so far removed from tangible measurements that we can scarcely form an idea of the magnitudes involved. In the animal and vegetable world there are many forms of life that are scarcely discernible by the best microscope, yet the molecule is infinitely smaller than these organisms. Some animal and vegetable forms of life are so small that they occupy less

than the millionth part of a cubic inch. A platinum wire may be drawn out finer than the finest spider web. The oscillations of a horizontal pendulum may be measured to the one eighty-millionth part of an inch. And yet, in the mathematics of the molecule, we come even nearer to the infinitesimal in measurements. The presence in water of the one hundred-millionth part of a grain of salt may be detected by the spectroscope. To increase the atoms to one fiftieth of an inch in diameter, a microscope magnifying ten million diameters would be necessary. The motion of the atoms would be increased in the same proportion, and we should see an object one fiftieth of an inch in diameter, moving in the field of the microscope at a rate five hundred million times greater than a cannon ball. -

Thomson, Clausius, Maxwell, and others have given us some curious facts upon this subject. A cubic inch of hydrogen gas, at the freezing temperature of water, and the pressure of one atmosphere, contains about three hundred millions of millions of millions of atoms, all moving at the rate of over a mile per second, making nearly eighteen billions of oscillations in different directions in the same second.

Thomson illustrates the size of a molecule by the following comparison: "If a drop of water as large as a pea were increased to the size of the earth, the molecules increasing in the same proportion, they would be less in size than cricket balls, and smaller than shot." The incessant motion of small particles may be beautifully illustrated by finely pulverizing indigo or carmine, mixing with water, and then placing them under a microscope. The particles will be seen to be in continuous motion. Atoms and molecules are in constant vibration. The amplitude of the vibration of these particles gives rise to the phenomena of heat and light, and if the theories of many prominent scientists be true, of electricity as well.

## CHAPTER XIV

### RECREATIONS IN LATIN

**Humors of the Study.**—The humors of Latin study have been famous for centuries. Grave and severe men who seldom indulged in other forms of levity have been merry in the quaint conceits of which the Latin language is susceptible, and almost every school in which Latin is taught has its own folk-lore of happy turns of expression and humorous sallies in the language of the old Roman world. However trivial these may seem, they add zest to the study and lend a charm to what might prove otherwise a form of drudgery.

**Paronomasia, or Play upon Words.**—Here are some specimens of Latin puns:

All pupils in Latin are familiar with the query of a college student addressed to an indisposed classmate,

*“Sic tu?”* — Art thou thus?

and with the reply of the ailing boy,

*“Sum sic!”* — I am thus.

At a place where hock was a fashionable beverage, a pedantic student once gave to a waiter the order:

*“Bring me some hock — hic, haec, hoc.”*

The waiter, who was not unacquainted with the Latin grammar, took no note of the order.

“Didn’t I order some hock?” asked the pedant, some time later, with some asperity.

"Yes, but you afterwards *declined* it," was the reply.

It is related that when Lord Napier stormed the famous Indian stronghold, he reported his victory in a single word:

"*Peccavi*" — I have *sinned* (Scinde).

A similar message is the one said to have been received by Queen Elizabeth, announcing the defeat of the Spanish Armada:

"*Cantharis*" — The Spanish *fly*.

Likewise it is said that when an officer of Louis Philippe, in Algeria, failed to secure a famous Barbary prisoner who had fallen into his hands, he reported the escape of his charge in the message:

"*Perdidi diem*" — I have lost a *day* (Dey).

Dr. Samuel Johnson wrote as an epitaph for his favorite tabby:

"*Mi* — *cat* inter omnes" — He shines among all;

and Saxe prefixes to his *Sonnet to a Clam* the sententious words of Cicero:

"*Dum tacent, clam-ant*" — While they are speechless, they cry aloud.

It is said that when Rabelais, the witty priest, came to die, he called for a domino (a priest's hood) which he carefully put on, remarking at the time:

"*Beati sunt qui moriuntur in domino*" — Blessed are they who die in the Lord.

The pun of a friar (Gregory VII.) has been famous throughout the world. Seeing some English captives at Rome, he was so impressed by the beauty of their features — fair hair, blue eyes, and snowy skin — that he inquired who they were.

"*Angli*" (Angles), was the response of a bystander.

"*Non Angli, sed angeli*," said the enraptured friar (subsequently Pope) — Not Angles, but *angels*.

On inquiring the name of the province from which they came, he was told that this was Deira (*de ira* — from wrath). His second remark was that they must be saved from wrath. On being told that their king was the British *Ælla*, he added that they must sing the *Alleluias* (hallelujahs) of the redeemed.

When he became Pope, Gregory did not forget the captives in the Roman market place, but sent Augustine to Britain, to convert the island to Christianity.

The word *pony* is applied by pupils in Latin to a key, or translation, which is a help in their rendering of the classics, the idea being that such a book serves as a horse, to carry the learner on his way. The true meaning of the word is different, however. It is not really *pony*, but *pone* (meaning behind), and was applied at first to a prompter in a game of cards, who sat behind the player, and gave him "points" on the game.

**Notable Utterances in Latin.** — Famous sayings in the Latin by historical personages belong to the folk-lore of many nations.

At a church council held at Constance, in Switzerland, in 1414, the Emperor Sigismund was very anxious to have some energetic action taken against heresy. In his speech at the opening of the council he used these words:

"*Date operum ut illa nefanda schisma eradicatur.*" — See to it that this deadly schism is destroyed.

A worthy monk, noticing that the Emperor had made the word *schism* a feminine, ventured to remonstrate gently, saying:

"*Domine, schisma est generis neutris.*" — My Lord, *schism* is of the neuter gender.

This provoked the famous retort:

"*Ego sum Rex Romanus et super grammaticam.*" — I am the Roman sovereign, and above grammar.

Cornelius de Witt, the patriot of the Netherlands, whose death is described in Motley's *Life of John of Barneveld*, and in Dumas' *Black Tulip*, died repeating the famous *Third Ode* of the Third Book of Horace, beginning:

*Iustum et tenacem propositi virum* — The man who is just and tenacious of purpose.

The *Twenty-second Ode* of the First Book of Horace was chanted by the United German Singing Society at the cemetery when the remains of President Garfield were placed in the tomb, on September 26, 1881. The first stanza of this ode is as follows:

Integer vitæ scelerisque purus  
Non eget Mauris jaculis, neque arcu,  
Nec venenatis gravida sagittis,  
Fusce pharetra —

The man of upright life, and pure from wickedness,  
Needs not the Moorish javelins or bow or quiver  
Loaded with poisonous darts, O Fuscus.

**Familiar Latin Phrases and Proverbs.** — Most dictionaries contain, in their supplementary lists, familiar Latin expressions, with their English equivalents. With many of these the ordinary reader should be acquainted, since he is certain to hear them and to encounter them in his general reading. A brief list of such expressions is given here. The teacher should extend his acquaintance, not only with common expressions in Latin, but also with those which have been borrowed from other languages — notably the French and Italian.

*Ab initio* — From the beginning.

*Ad eundem (gradum)* — To the same degree.

*Ad infinitum* — To infinity.

*Ad interim* — In the meanwhile.

*Ad libitum* — At pleasure.

*Ad nauseam* — To disgust.

*Ad valorem* — According to the value.

- Ære perennius* — More enduring than brass.  
*A fortiori* — With stronger reason.  
*Anno Domini* (A.D.) — In the year of our Lord.  
*Anno mundi* (A.M.) — In the year of the world.  
*Anno urbis conditæ* (A.U.C.) — In the year of the building of the city (Rome — 753 B.C.).  
*Bona fide* — In good faith.  
*Cacoëthes loquendi* — A rage, or itch, for speaking.  
*Cacoëthes scribendi* — An itch for writing.  
*Casus belli* — That which causes or justifies war.  
*Caveat emptor* — Let the purchaser beware.  
*Cum grano salis* — With a grain of salt (making allowance for exaggeration).  
*Ecce homo* — Behold the man.  
*E pluribus unum* — Out of the many the one.  
*Festina lente* — Hasten slowly.  
*Helluo librorum* — A devourer of books.  
*Hic jacet* — Here lies.  
*In articulo mortis* — In the grasp of death.  
*Index ex purgatorius* — A list of prohibited books.  
*In extenso* — At full length.  
*In hoc signo vinces* — Under this standard thou shalt conquer.  
*In memoriam* — In memory.  
*Jacta est alea* — The die is cast.  
*Labor omnia vincit* — Labor conquers all things.  
*Mens sana in corpore sano* — A sound mind in a sound body.  
*Mutatis mutandis* — The necessary changes being made.  
*Nemo me impune lacessit* — No one wounds me with impunity.  
*Non sequitur* — It does not follow.  
*Obiter dictum* — A thing said (by a court) in passing, and not material to the cause.  
*O tempora ! O mores !* — O the times ! O the manners !  
*Pater patriæ* — The father of his country.  
*Petitio principii* — A begging of the question.  
*Quantum sufficit* — As much as may be needed.  
*Quod erat demonstrandum* — Which was to be demonstrated.  
*Resurgam* — I shall rise again.  
*Scire facias* — Cause it to be known.  
*Sic semper tyrannis* — Ever so to tyrants.  
*Stet* — Let it stand.  
*Summum bonum* — The highest good.  
*Tabula rasa* — A blank tablet.



*Tu quoque, Brute* — And thou too, Brutus! (Implying betrayal by a friend.)

*Ultima Thule* — The utmost limit. (The unexplored world.)

*Vade mecum* — Go thou with me. (A constant companion.)

*Viva voce* — By the living voice.

*Vox humana* — The human voice.

. **Roman Proverbs.** — There are many proverbial expressions of the ancient Romans which have come down to us, a few of which may be mentioned here.

*Ad Kalendas Græcas* means, In the time of the Greek calends. Since the Greeks had no calends, this means no time at all.

*Aliquando bonus dormitat Homerus* signifies, Even the good Homer sometimes nods; that is to say, the greatest authorities are liable to err.

*Ab ovo usque ad mala*, meaning from the egg to the apples, indicates an entire banquet, from the first course to the last, since the Roman banquet began with eggs and ended with fruits.

*Deus ex machina*, meaning, literally, a god from the machine, had reference to the theatrical contrivance for letting down a god from the ceiling to take part in a drama. This introduction of a god was not deemed justifiable unless the plot of the play became so entangled as to admit of no satisfactory solution without divine interposition. Hence, *Deus ex machina* came to mean any unexpected deliverance or fortunate circumstance.

*Ex pede Herculem* signifies, From the foot, a Hercules. That is to say, we judge of the whole from the specimen.

*Veni, vidi, vici*, meaning, I came, I saw, I conquered, was the brief dispatch in which Cæsar heralded his victory in a campaign of remarkable brevity and brilliancy.

**Epigrammatic Extracts from Latin Authors.** — There is much of sententious wisdom in quotations from the classics, which are often valuable for this as well as for their aids to the study of Latin.

It is good practice for the teacher of Latin to write upon the blackboard, each day, some notable sentiment from a Latin author, and for the pupils to copy the series of such quotations in an exercise book. Among the passages suitable for the purpose are the following:

*Nemo repente fuit turpissimus.* — **JUVENAL.**

No one ever became very wicked at once.

*Neque semper arcum tendit Apollo.* — **HORACE.**

Apollo does not always keep his bow bent.

*Ne quid nimis.* — **TERENCE.**

Nothing in excess.

*Nil actum reputans, si quid superesset agendum.* — **LUCAN.**

Deeming nothing done, if anything remained to do.

*Non omnia possumus omnes.* — **VERGIL.**

We cannot all do all things.

*Nullum est jam dictum quod non dictum sit prius.* — **TERENCE.**

Nothing is said now that has not been said before.

*Omne ignotum pro magnifico.* — **TACITUS.**

Everything unknown is magnificent.

*Pectus est quod disertos facit.* — **QUINTILIAN.**

It is the heart that makes men eloquent.

*Omne solum forti patria est.* — **OVID.**

Every land is a home to the brave man.

*Juvenile vitum regere non posse impetum.* — **SENECA.**

It is the fault of youth not to be able to control its own violence.

*Nihil est ab omni parte beatum.* — **HORACE.**

Nothing is a complete blessing.

*Fortuna multis dat nimium; nulli satis.* — **MARTIAL.**

Fortune to many gives too much; to none enough.

*Non ut diu vivamus curandum est, sed ut satis.* — **SENECA.**

Not that we should care to live long, but well.

*Omnem crede diem tibi dilexisse supremum.* — **HORACE.**

Consider each of your days to be your last.

*Vita enim mortuorum in memoria vivorum est posita.* — **CICERO.**

For the life of the dead still lives in the memory of the living.

*Veritas absolutus sermo ac semper est simplex.*

— AMMIANUS MARCELLINUS.

The language of truth is always unadorned and simple.

*Omnia quæ vindicaris in altero, tibi ipsi vehementer fugienda sunt.*

— CICERO.

Everything that you find fault with in others be especially sure to avoid yourself.

*Patria est communis omnium parens.* — CICERO.

Our country is the common parent of all.

*Cujusvis hominis est errare; nullius nisi insipientis in errore perseverare.* — CICERO.

Any man may err; no one but a fool will continue in error.

*Esse oportet ut vivas, non vivere ut edas.* — CICERO.

You should eat to live, not live to eat.

*Ratio et oratio conciliant inter se homines.* — CICERO.

Reason and speech unite men to each other.

*Memoria est thesaurus omnium rerum et custos.* — CICERO.

Memory is the treasury and guardian of all things.

*Ut sementem feceris, ita metes.* — CICERO.

As thou sowest, so shalt thou reap.

*Vivere est cogitare.* — CICERO.

To live is to think.

*Adversæ res admonent religionem.* — LIVY.

Adversity calls men to religion.

*Bonitas non est pessimis esse meliorem.* — SENECA.

It is not goodness to be better than the very bad.

*Alea jacta est.* — (Reported by Suetonius) JULIUS CÆSAR.

The die is cast.

*Audentes fortuna juvet.* — VERGIL.

Fortune favors the bold.

*Dimidium facti, qui cœpit, habet.* — HORACE.

He who has begun has half finished.

*Faber est quisque fortunæ suæ.* — SALLUST.

Every man is the architect of his own fortunes.

*Homo sum; humani nihil a me alienum puto.* — TERENCE.

I am a man; I think nothing foreign to me that concerns humanity.

## OUTLINE OF MANN'S SCHOOL RECREATIONS AND AMUSEMENTS, AND SUGGESTIONS TO THE TEACHER.

THE study of this volume is apportioned among the various months of the Reading Circle year, as indicated below. The analysis has been made in the book in the sub-heads of paragraphs, and with such fullness as to do away with the necessity for appending an analytical outline as an aid to the Reading Circle work. The reading should be thorough, and the teacher should seek constantly to apply to his own school whatever suggestions may be offered in every chapter for the promotion of the pupils' health and growth of mind and body.

FIRST MONTH, PREFACE AND CHAPTER I. — In reading the Preface, note the ideas upon which the book is based, and consider the responsibility of the teacher in the matter of rendering the school work inviting and invigorating.

In Chapter I. make a careful study of the Scriptural parallelisms, and observe how the correlation of Scripture with literature adds to the interest of both. Decide upon your own course in the matter of devotional exercises in the school. Whatever this may be, arrange by yourself an extension of the Scripture readings presented as a means of culture. Prepare an extension of the quotations from authors, and determine the use you are to make of them. According to the advancement of your pupils, adapt and extend the suggestive outline of current events.

SECOND MONTH, CHAPTERS II., III., AND IV. — Compare your own experience with that of the teacher mentioned in Chapter II. Apply the suggestions to the care of your schoolroom. What can you do in the matter of a school cabinet? of botanical and entomological collections? of pictures? If you have small pupils, you can make use of the singing games of Chapter III. Some of the songs will be suitable for the pupils of more advanced grades. If your pupils are all too old for these games, you will at least find the latter to possess interest in themselves. The game of *The Bridge of Avignon* is said to be at least five centuries old. The music of *The Missing Pupil* (*Au Clair de la Lune*) is famous as the song of "Trilby." The older version of *King Will* dates back two centuries in English history. *Come, Comrades*, in some form, is sung in many nations and in many tongues.

What profitable use can you make of singing geography? Note carefully the lessons on home geography. What class use can you make of imaginary journeys? of supplementary geographical reading? of sample products? of observations of the weather? of geographical compositions? If you do not teach geography, use the chapter for your own individual advancement. Familiarize yourself with the poems of place, and with various books mentioned; note the etymologies and the variations of geographical names; observe the modern trend of the science, and seek opportunities for advancement in physiography.

THIRD MONTH, CHAPTERS V. AND VI. — Consider carefully the described defect in American education. What influence can you exert to remedy it in your school? What are your opportunities for teaching physical culture? Make use of some or all the simple exercises without apparatus, previously mastering them so as to be independent of the book. If you cannot fit up an exercise room, or gymnasium, in connection with the school, probably you can lend your influence in favor of such an enterprise else-

where. In any event, you will desire for your own use the information contained in the chapter.

What is your opinion of the desirability of a general acquaintance with the elements of military drill among the youth of the land, as an element of national safety? Apart from this view of the subject, have you fully considered the value of military exercises as a means of physical culture and of discipline? How can you make use of the military drills among the boys of your school? How can you adapt them to the training of girls in flag drills? Consider the advantages of encouraging your pupils to practice boating, swimming, cycling, etc.

FOURTH MONTH, CHAPTERS VII. AND VIII. — Chapter VII. will prove valuable to any teacher, of whatever school or department, as a means of general culture. The mnemonic rhymes in Chapter VII. will prove serviceable as a labor-saving device in the teaching and study of general history. The work of the iconoclasts and the relation of folk-lore to history are necessary to a comprehension of the modern idea of history. If you teach history, make use of the "original sources of history" quoted, and extend the number of the quotations by a selection of your own, as opportunity offers. Acquaint yourself with the mythical British and pre-Columbian American accounts. Follow out, as far as possible, the historical characters and themes mentioned in the chapter. Compare historical writers as to style. Acquire for yourself an appreciation of the essence of history. If you teach the subject, present it in the light of modern thought and criticism.

The outdoor amusements presented in Chapter VIII. include various games, some old, some new. Consider which of these can be used most advantageously by the pupils of your school, either on the school grounds or elsewhere as holiday recreations. If you do not find it necessary to exert an active influence in the healthful amusements of pupils, at least indicate your interest in them. Some ac-

quaintance with the great national games of the most cultured peoples of the world is desirable for its own sake; and apart from the recreations of the pupils, every teacher should acquire personally some definite knowledge of the more famous outdoor games of the present time.

FIFTH MONTH, CHAPTER IX. — The subject of this chapter is one of special and practical interest to all teachers. Note, first, the recommendations of the Committee of Ten in reference to grammar and composition. What has been your experience in the use of reference books by pupils in composition? In teaching composition, make use of the abstract, the outline, amplification, and paraphrase. Require your pupils to write letters of various forms. Note the great and growing importance of business correspondence. Follow out, as a means of personal culture, the authors and subjects presented. Note the origin of the English novel, and the changes wrought in correspondence.

SIXTH MONTH, CHAPTERS X. AND XI. — Note the contrast presented between school life in the United States and in other countries, and consider how national patriotism and local spirit may be fostered in the school. Arrange for the celebration of the birthdays of certain authors and statesmen. Consider carefully the time to be devoted to any special exercises, and the nature of the observances. Consider how your Friday afternoon exercises may be improved. Give attention to the enunciation and the expression of your pupils in reading and speaking, and consider how the principles of elocution can be applied most generally and profitably in the school. If you have in mind a general exhibition, you can avail yourself of the suggestions of Chapter X. in the selection of representative materials. If you have not, make full use of the chapter for your own improvement, acquainting yourself with much of the literature to which reference is made. Note the origin of the English drama; the corrupt drama, and its evil influence; the revival of the classic drama in colleges.

In almost every school there are pupils sufficiently advanced to conduct simple debates, and to transact the ordinary business of a school society. The brief summary of parliamentary forms will be of value in any literary organization of the pupils, and the list of subjects will be found to contain a wide range of topics suitable for discussions. Apply the suggestions of the chapter in bringing out the ability of your pupils to think clearly and to express their thoughts naturally and logically. If you have no immediate occasion to make use of the forms of parliamentary procedure, at least make sure that you yourself have a ready acquaintance with them.

SEVENTH MONTH, CHAPTER XII. — Note the recommendation of the Committee of Ten in reference to the study of simple, natural phenomena in the elementary schools, and the contrast which this presents to the former theory and practice of science teaching.

The "Easy Experiments" of this chapter are somewhat general in their scope, and for the most part may be adapted to use in various grades. The younger the pupils, the more careful and specific must be the explanations. What use can you make of any of these experimental lessons? Adapt them, in your own way, to the advancement of your pupils; or, if for any reason you find it unnecessary or impracticable to make present use of them in the schoolroom, study them carefully for a review of principles in physics. It is one thing to know a principle, and another to be able, on a moment's notice, to explain and illustrate it with a simple experiment and demonstration. It is one thing to secure a result, and another to be able to explain clearly how it was secured. A mastery of this chapter, and the experience which will come from the actual performance of the experiments, will add materially to the equipment of any teacher. Often experiments of the kind suggested, performed with simple apparatus, can be used for an evening entertainment,



wholly outside of school hours, and will serve to interest parents and other visitors, as well as the pupils. Winter evenings in the country may be thus employed to great advantage. Some of the experiments may be utilized in teachers' meetings and Institutes. The ability to perform them readily, to explain them clearly, and to adapt them to the occasion, is one of sufficient importance to justify the teacher in devoting to the subject a month of careful reading and study, supplementing the chapter with additional readings in recent publications on the subject of physics and experiments.

EIGHTH MONTH, CHAPTERS XIII. AND XIV. — What has been said in reference to the work of the preceding month will apply generally to the subject of experiments in chemistry. Comparatively few pupils make a study of chemistry as a science, and the opportunity of the many for any clear ideas on the subject is to be found only in the object lesson or in the evening lecture. Apart from the benefit which you personally receive from a review of the subject, what use can you make of this chapter? Perhaps you can present some of the experiments as object lessons in your school. It may be better for you to present them in an evening entertainment of pupils and patrons. At least you will have occasion, at times, to make general use of some of the explanations of chemical changes. Note which of the experiments possess an element of risk or danger when performed by the unskillful, and observe great caution in the case of such.

The Recreations in Latin are not intended for teachers and pupils of Latin classes exclusively. Every teacher should have some knowledge of Latin words and their equivalents — especially of the Latin phrases which have come into common use. If you are a teacher of Latin, make use of the extracts from classic authors, as suggested in the chapter. In any event, familiarize yourself with the common Latin phrases and their definitions.

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